ACKNOWLEDGMENT OF COMPLETION REPORT

FOR

BNSF PANHANDLE DERAILMENT WEST OF INTERSECTION U.S. HIGHWAY 60 AND FARM-TO-MARKET 293E SPUR PANHANDLE, CARSON COUNTY, TEXAS

Prepared for

U.S. Environmental Protection Agency

Will LaBombard, Project Officer 1445 Ross Avenue Dallas, Texas 75202

Contract No. EP-W-06-042
Technical Direction Document No. 1/WESTON-042-16-023
WESTON WON 20406.012.001.1019.01
NRC No. 1151859
FPN ID N/A
CERCLIS ID N/A
EPA OSC William Rhotenberry
START-3 PTL Jóse Ojeda

Submitted by

Weston Solutions, Inc.

Cecilia H. Shappee, P.E., Program Manager 5599 San Felipe, Suite 700 Houston, Texas 77056 (713) 985-6600

September 2016

NRC No. 1151859

1. INTRODUCTION

On 28 June 2016, a representative of BNSF Railway (BNSF) reported a discharge of diesel to the National Response Center (NRC) Report No. 1151859, due to a collision of two freight trains west of the intersection of U.S. Highway 60 and Farm-to-Market (FM) 293E Spur in Panhandle, Carson County, Texas. An unknown volume of diesel was reported to have impacted the ballast of the rail line. The cause of the collision is unknown as of the date of this report. On 28 June 2016, the U.S. Environmental Protection Agency (EPA) Region 6 Emergency Management Branch (EMB) activated Weston Solutions, Inc. (WESTON®), the EPA Region 6 Superfund Technical Assessment and Response Team (START-3) contractor, to conduct a Tier 2 incident response. Under direction from EPA On-scene Coordinator (OSC) William Rhotenberry and as outlined in Technical Direction Document (TDD) No. 1/WESTON-042-16-023 (Attachment I), START-3 was tasked to assess the impact of the incident and response activities; to document the incident and response activities; to analyze data that was collected; to provide technical support to EPA; to provide website updates; and to complete this Final Report.

The geographic coordinates of the train collision where the discharge originated are Latitude 35.345103° North and Longitude 101.368887° West, as determined by using a handheld Global Positioning System (GPS) based on the World Geodetic System – 1984 (WGS-84) with accuracy estimated at less than 50-feet circular probable error. A Site Location Map, Site Area Map, and Site Layout Map are included as Attachments A, B, and C, respectively.

2. BACKGROUND

On 28 June 2016 at approximately 0825 hours, two BNSF freight trains collided head-on in Panhandle, Carson County, Texas, on the main rail line known as the Southern Transcon. Initial information received by the NRC reported an unknown volume of diesel fuel spilled onto the ballast of the rail line. An incident update by BNSF and the Texas Commission on Environmental Quality (TCEQ) reported diesel from the eight locomotive engines (four engines per train) involved in the incident was burning, with no emergency evacuations or road closures initiated in the area. Three BNSF personnel were unaccounted for and presumed dead by the Texas Department of Public Safety.

NRC No. 1151859

Four locomotives and six railcars from the southwest bound train were derailed as a result of the collision with the northeast bound train. The six damaged railcars contained mixed commodities with no hazardous materials (HAZMAT) listed on the railroad consists. The consists listed four railcars as containing HAZMAT, but these railcars were not affected by the collision.

Four locomotives and nine railcars from the northeast bound train were derailed due to the collision with the southwest bound train. Railcars 3 and 7 were listed as containing HAZMAT on the railroad consists. Railcar 3 was listed as UN1866, resin solution (resin solution flammable), and Railcar 7 was listed as UN1325, flammable solid organic, N.O.S. (aluminum). The remaining damaged railcars were listed as mixed commodities with no HAZMAT listed on the railroad consists. The northeast bound train had three other HAZMAT rails that were unaffected.

Due to changing on-site weather conditions and variable wind direction, an evacuation of a residential area located north-northwest of the incident location was initiated.

3. SUMMARY OF ACTIONS

On 28 June 2016, the EPA Team mobilized to the Carson County Law Enforcement Center and met with Environmental Investigators for the TCEQ Amarillo Region Office. An incident briefing was conducted with the EPA Team, and then the teams proceeded to the incident location.

At the incident location, the EPA Team met with Derrick Lamkin, BNSF representative, and their environmental contractors, Center for Toxicology & Environmental Health LLC (CTEH). CTEH described the current air monitoring and sampling operations that included hourly air monitoring from 13 Fixed Real Time (FRT) locations. At each FRT location, CTEH conducted air monitoring for volatile organic compounds (VOCs), particulate matter (PM 2.5), carbon monoxide (CO), nitrous oxide (NO), and sulphur dioxide (SO₂). Hourly air sampling was conducted at 4 FRT locations for aldehydes, metals, polycyclic aromatic hydrocarbons (PAHs), and VOCs (Attachment D).

The EPA Team reviewed the available data collected by CTEH. Particulates appeared to be the primary contaminant of concern. The EPA Team proceeded to locations north of U.S. Highway 60 (directly downwind of the incident) to conduct air monitoring utilizing two DataRAM 4TM Particulate

Monitors. Particulate readings ranged from 0.03 milligrams per cubic meter (mg/m³) to 1.60 mg/m³. Prevailing winds were gusting and there were no sustained readings.

On 28 June 2016, the remains of two BNSF crew members were found. The third BNSF crew member has not been found as of the date of this report and is presumed dead.

On 29 June 2016, the EPA Team and two TCEQ Environmental Investigators accompanied CTEH personnel to conduct air monitoring concurrently at the 13 FRT monitoring locations. Average particulate readings for the locations ranged from 0.001 mg/m³ to 0.007 mg/m³.

BNSF began wrecking operations that consisted of accessing the impacted railcars to evaluate the condition of the cargo, and stormwater controls (absorbent boom) were placed in the ditches to prevent off-site hydrocarbon migration. Vacuum trucks were mobilized and used for diesel fuel and oil recovery.

At approximately 1300 hours on 29 June 2016, a discussion was held with BNSF regarding remaining environmental issues. BNSF representatives stated that once site safety was established and the National Transportation Safety Board (NTSB) concluded their investigation, impacted soils from discharged diesel, engine oil, and various commodities whose containers were breached and spilled, would be excavated, sampled, and sent to either a local non-hazardous landfill or to a designated hazardous waste facility per TCEQ instructions and oversite.

Based on site conditions and the briefing conducted with BNSF representatives and TCEQ personnel, OSC Rhotenberry released the EPA Team from the site on 29 June 2016.

Recovery operations continued from 30 June 2016 through 21 July 2016, which included the recovery of 13,600 gallons of diesel fuel, 550 gallons of lube oil, and 1,500 gallons of oil/water. Additional derailment materials as well as burnt rail car contents and commodities were recovered and placed into roll off boxes or stockpiled on plastic sheeting pending off-site disposal.

Recycling and disposal of the various waste streams will continue until cleanup operations are complete. Confirmation samples will be collected by BNSF representatives following waste disposal activities. The samples will be analyzed for total petroleum hydrocarbons (TPH) by Method

TX1005/1006, VOCs by Method 8260, semivolatile organic compounds (SVOCs) by Method 8270), Resource Conservation Recovery Act (RCRA) metals plus aluminum by Method 6010. If elevated concentrations of constituents of concern are reported, then additional material will be removed. A second confirmation sample will be collected at that location and analyzed, if necessary. This procedure will be repeated until analytical data confirms that all impacted material has been removed.

This Final Report was prepared as part of the requirements of TDD No. TO-0001-42-16-23 and serves as documentation of work completed. Digital photographs, the NRC Report, the site logbook, the pollution report, and TDD No. 1/WESTON-042-16-023 are provided as Attachments E, F, G, H, and I, respectively.

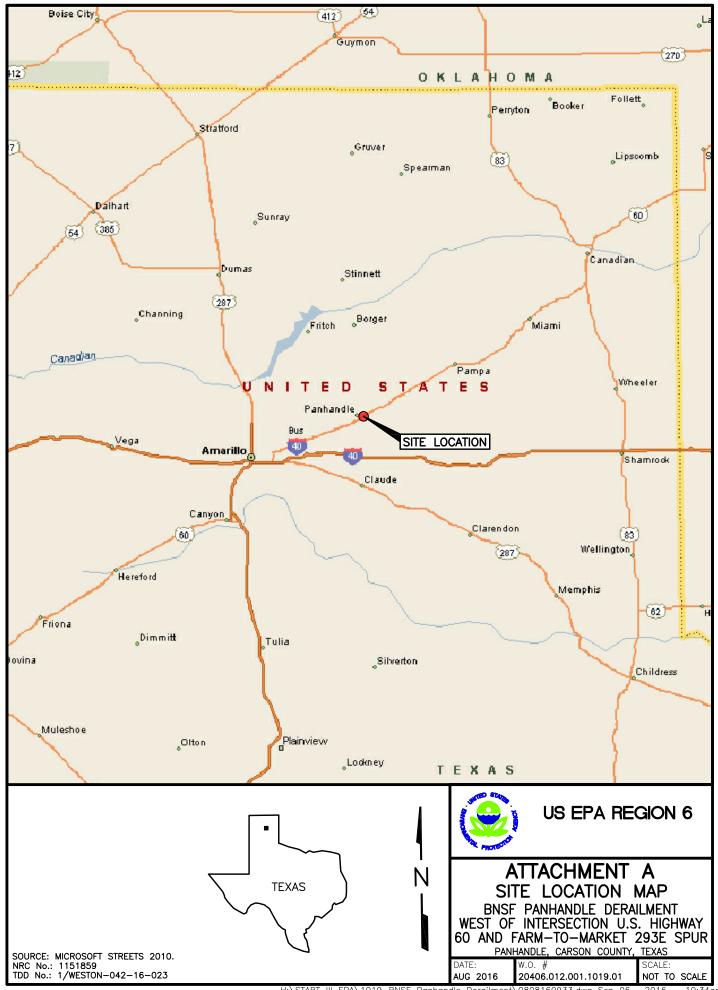
4. LIST OF ATTACHMENTS

- A. Site Location Map
- B. Site Area Map
- C. Site Layout Map
- D. CTEH Summary of Air Monitoring Results
- E. Digital Photographs
- F. NRC Report No. 1151859
- G. Site Logbook
- H. Pollution Report
- I. TDD No. 1/WESTON-042-16-023

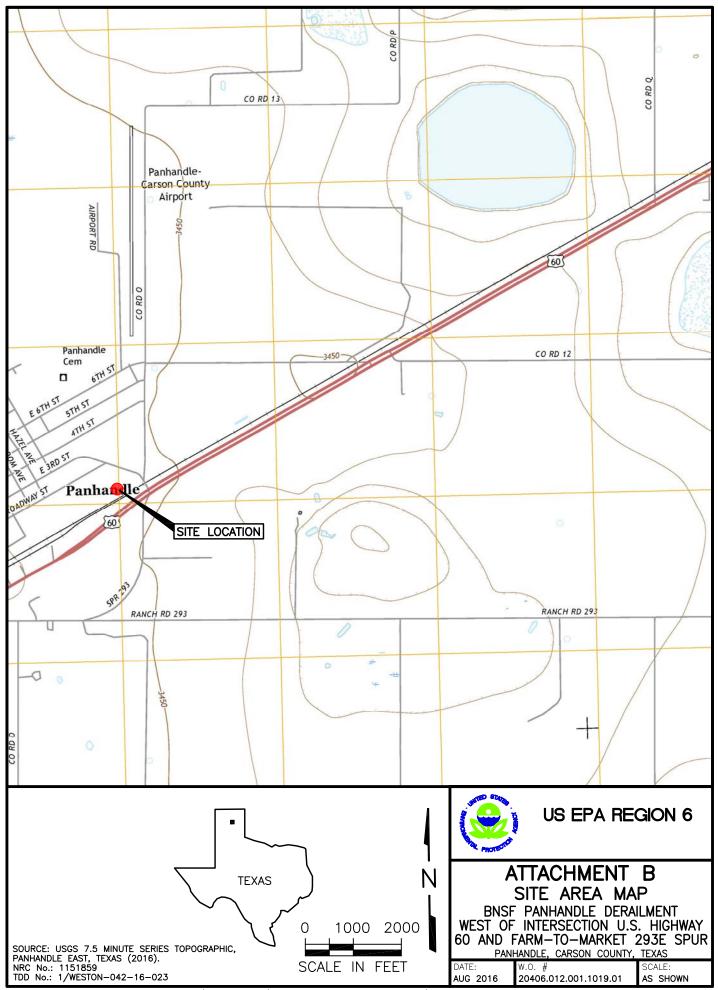
The EPA Task Monitor did not provide final approval of this report prior to the			
completion date of the work assignment. Therefore, Weston Solutions, Inc. has			
submitted this report absent the Task Monitor's approval.			

The EPA Task Monitor has provided final approval of this report. Therefore, Weston Solutions, Inc. has submitted this report with the Task Monitor's approval.

Attachment A
Site Location Map



Attachment B Site Area Map



Attachment C
Site Layout Map





Panhandle, TX BNSF Train Collision/Fire

Summary of Air Monitoring Results

June 29, 2016

Prepared by
Center for Toxicology and Environmental Health, L.L.C.



Introduction

This report summarizes the work conducted by Center for Toxicology and Environmental Health, LLC (CTEH®) in response to a request for air monitoring support by BNSF Railway following the head-on collision and subsequent fire of locomotives and intermodal cars near Panhandle, TX. On June 28, 2016, CTEH® conducted real-time air monitoring to evaluate the potential presence of carbon monoxide (CO), nitrogen oxide (NO), particulate matter (PM_{2.5}), sulfur dioxide (SO₂), total volatile organic compounds (VOCs), and atmospheric flammability as a percentage of the lower explosive limit (LEL). This submittal summarizes real-time air monitoring data recorded on CTEH® instrumentation between the beginning of monitoring activities on June 28, 2016 17:00 to June 29, 2016 12:00.

Real-time Air Monitoring

CTEH® efforts consisted of manually-logged real-time air monitoring using handheld instrumentation. Real-time air monitoring was conducted to assess air quality in the community as well as the breathing zone of workers involved in the response. Monitoring was conducted using instruments such as the RAESystems MultiRAE Plus and MultiRAE Pro, and Gastec pumps with chemical-specific colorimetric tubes. **Table 1** summarizes the air monitoring data for manually-logged real-time readings in the community. **Table 2** summarizes the air monitoring data for manually-logged real-time readings taken to assess worker breathing zone air quality. **Attachment A** contains incident maps including site location, topography and hydrography, and manually-logged handheld real-time reading locations.

Analytical Air Sampling

CTEH® efforts consisted of deploying analytical sampling media at four locations to collect samples for the following profiles: metals, aldehydes, polynuclear aromatic hydrocarbons (PNAHs), and volatile organics using integrated sampling pumps and Minicans. Sampling for metals, aldehydes, and PNAHs are run in concurrent 12 hour periods. The hydrocarbon profile sampling period is 24 hours.

All samples will be sent to an American Industrial Hygiene-accredited analytical testing lab and results reported in future submittals as they become available.



Table 1: Manually-Logged Real-Time Air Monitoring Summary: Community Breathing Zone June 28, 2016 17:00 to June 29, 2016 12:00

Analyte	Count of Readings	Count of Detects	Detection Range
CO (ppm)	82	0	< 1 ppm
LEL (%)	3	0	< 1 %
NO (ppm)	16	0	< 0.1 ppm
PM2.5 (mg/m3)	83	83	0.001 - 2.530 mg/m3
SO2 (ppm)	29	0	< 0.1 ppm
VOC (ppm)	83	0	< 0.1 ppm

¹ If detections were not observed, analyte concentration is shown as less than the instrument detection limit.

Table 2: Manually-Logged Real-Time Air Monitoring Summary: Worker Breathing Zone June 28, 2016 17:00 to June 29, 2016 12:00

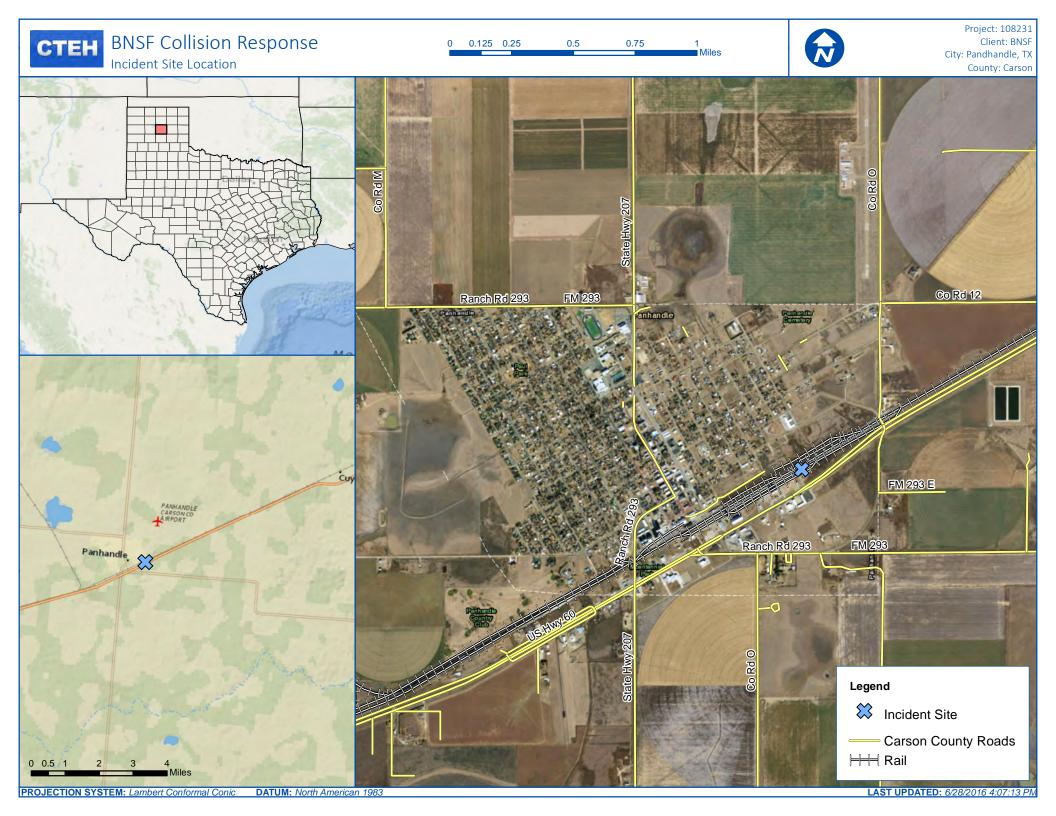
Analyte	Count of Readings	Count of Detects	Detection Range
CO (ppm)	58	10	1 - 14 ppm
LEL (%)	6	0	< 1 %
NO (ppm)	28	0	< 0.1 ppm
PM2.5 (mg/m3)	52	52	0.003 - 3.420 mg/m3
SO2 (ppm)	22	2	0.2 - 0.3 ppm
VOC (ppm)	64	7	0.1 - 0.6 ppm

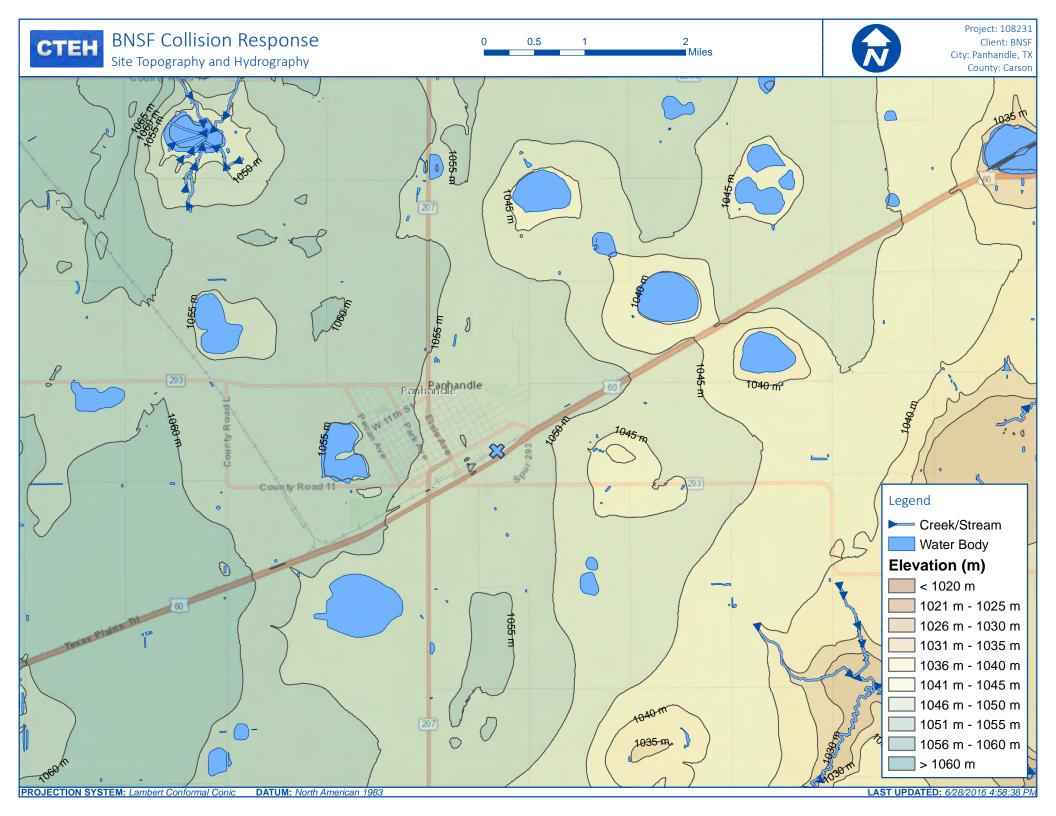
 $^{^1\!}I\!f$ detections were not observed, analyte concentration is shown as less than the instrument detection limit



Attachment A:

Incident Maps









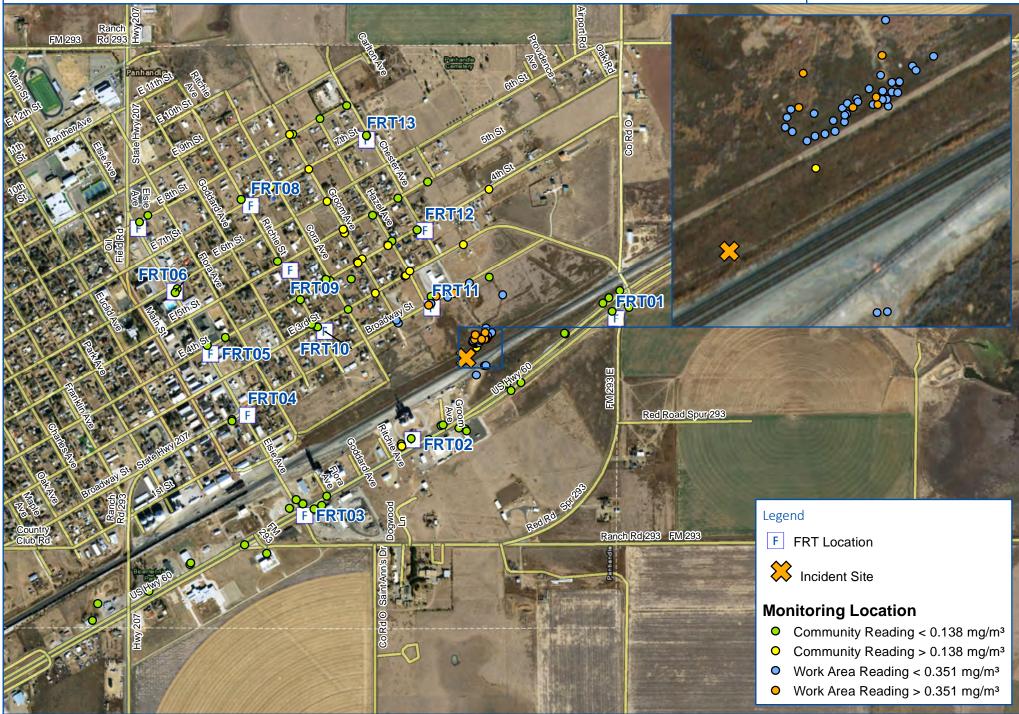


Project: 108231 Client: BNSF City: Panhandle, TX County: Carson





Project: 108231 Client: BNSF City: Panhandle, TX County: Carson





Panhandle, TX BNSF Train Collision/Fire

Summary of Air Monitoring Results

June 30, 2016

Prepared by
Center for Toxicology and Environmental Health, L.L.C.



Introduction

This report summarizes the work conducted by Center for Toxicology and Environmental Health, LLC (CTEH®) in response to a request for air monitoring support by BNSF Railway following the head-on collision and subsequent fire of locomotives and intermodal cars near Panhandle, TX. On June 29, 2016, CTEH® conducted real-time air monitoring to evaluate the potential presence of acrylates, carbon monoxide (CO), ethyl acetate, nitrogen oxide (NO), particulate matter (PM_{2.5}), sulfur dioxide (SO₂), and total volatile organic compounds (VOCs). This submittal summarizes real-time air monitoring data recorded on CTEH® instrumentation between June 29, 2016 7:00 and June 30, 2016 07:00.

Real-time Air Monitoring

CTEH® efforts consisted of manually-logged real-time air monitoring using handheld instrumentation. Real-time air monitoring was conducted to assess air quality in the community as well as the breathing zone of workers involved in the response. Monitoring was conducted using instruments such as the RAESystems MultiRAE Plus and MultiRAE Pro, and Gastec pumps with chemical-specific colorimetric tubes. Additionally, a DustTrak DRX monitor was set to log PM_{2.5} concentrations near the BNSF staging area near the baseball field adjacent to the derailment site. **Table 1** summarizes the air monitoring data for manually-logged real-time readings in the community. **Table 2** summarizes the air monitoring data for manually-logged real-time readings taken to assess worker breathing zone air quality. **Attachment A** contains incident maps including site location, topography and hydrography, and manually-logged handheld real-time reading locations. **Attachment B** contains a trend graph depicting PM_{2.5} concentrations from the data-logged DustTrak monitor.

Analytical Air Sampling

CTEH® efforts consisted of deploying analytical sampling media at four locations to collect samples for the following profiles: metals, aldehydes, polynuclear aromatic hydrocarbons (PNAHs), and volatile organics using integrated sampling pumps and Minicans. Sampling for metals, aldehydes, and PNAHs are run in concurrent 12 hour periods. The hydrocarbon profile sampling period is 24 hours.

All samples will be sent to an American Industrial Hygiene-accredited analytical testing lab and results reported in future submittals as they become available.



Table 1: Manually-Logged Real-Time Air Monitoring Summary: Community Breathing Zone June 29, 2016 17:00 to June 30, 2016 07:00

Analyte	Count of Readings	Count of Detects	Detection Range
CO (ppm)	125	0	< 1 ppm
NO (ppm)	23	0	< 0.1 ppm
PM2.5 (mg/m3)	124	124	0.002 – 0.893 mg/m3
SO2 (ppm)	27	0	< 0.1 ppm
VOC (ppm)	122	0	< 0.1 ppm

 $^{^1}$ lf detections were not observed, analyte concentration is shown as less than the instrument detection limit.

Table 2: Manually-Logged Real-Time Air Monitoring Summary: Worker Breathing Zone June 29, 2016 7:00 to June 30, 2016 07:00

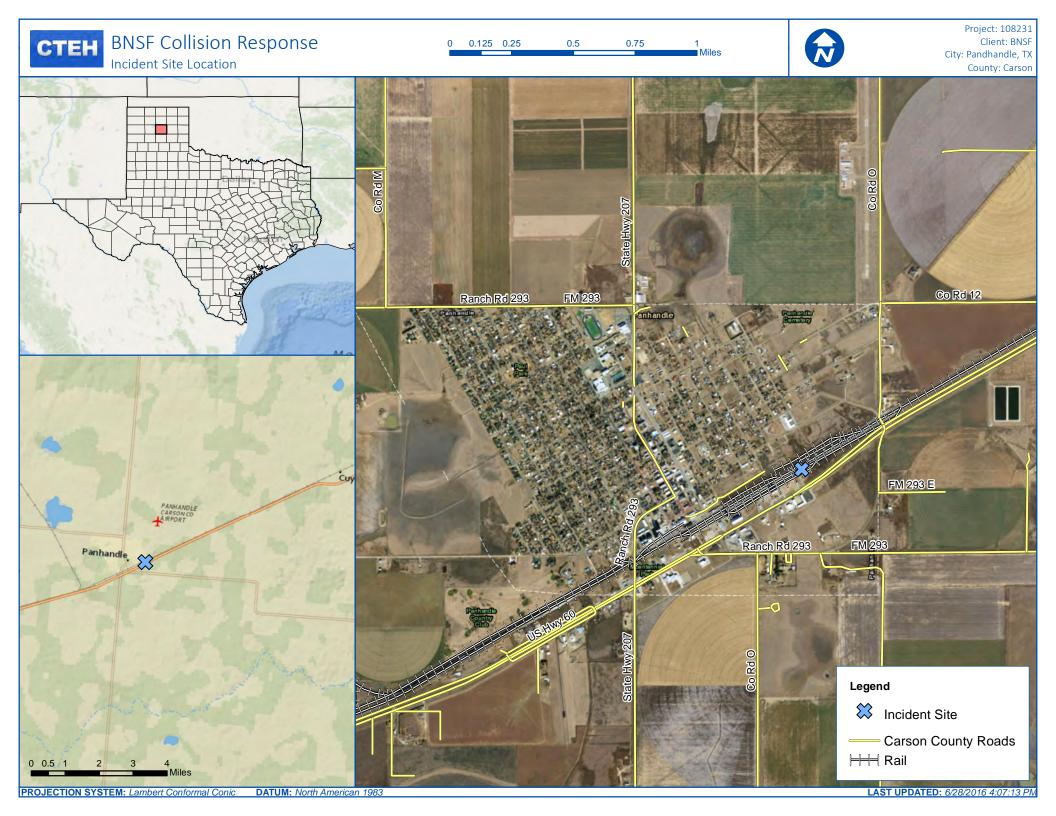
Analyte	Count of Readings	Count of Detects	Detection Range
² Acrylates	6	0	< 2 ppm
CO (ppm)	12	0	< 1 ppm
Ethyl Acetate	1	0	< 1 %
NO (ppm)	6	0	< 0.1 ppm
PM2.5 (mg/m3)	3	0	0.009 – 0.055 mg/m3
SO2 (ppm)	10	0	0.2 - 0.3 ppm
VOC (ppm)	13	2	1.3 – 1.5 ppm

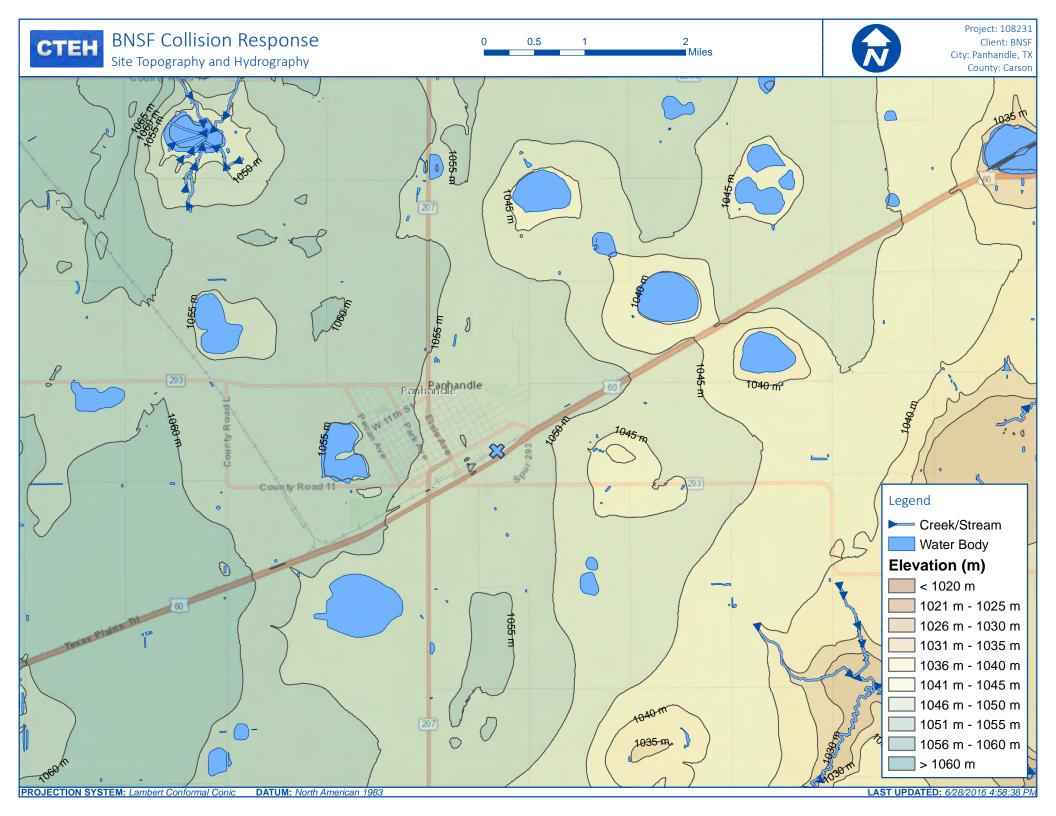
¹If detections were not observed, analyte concentration is shown as less than the instrument detection limit ²Acrylates monitored using butyl acetate colorimetric tube with a correction factor of 0.7 for butyl acrylate and 0.26 for isobutyl acrolate



Attachment A:

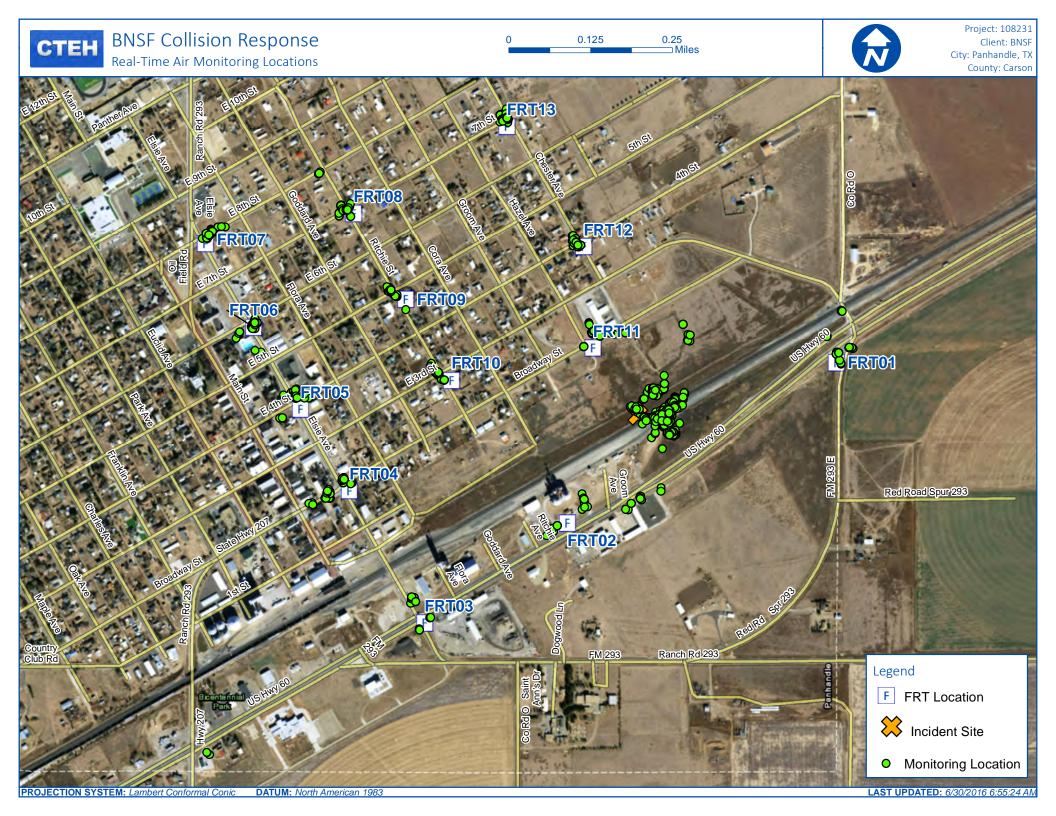
Incident Maps





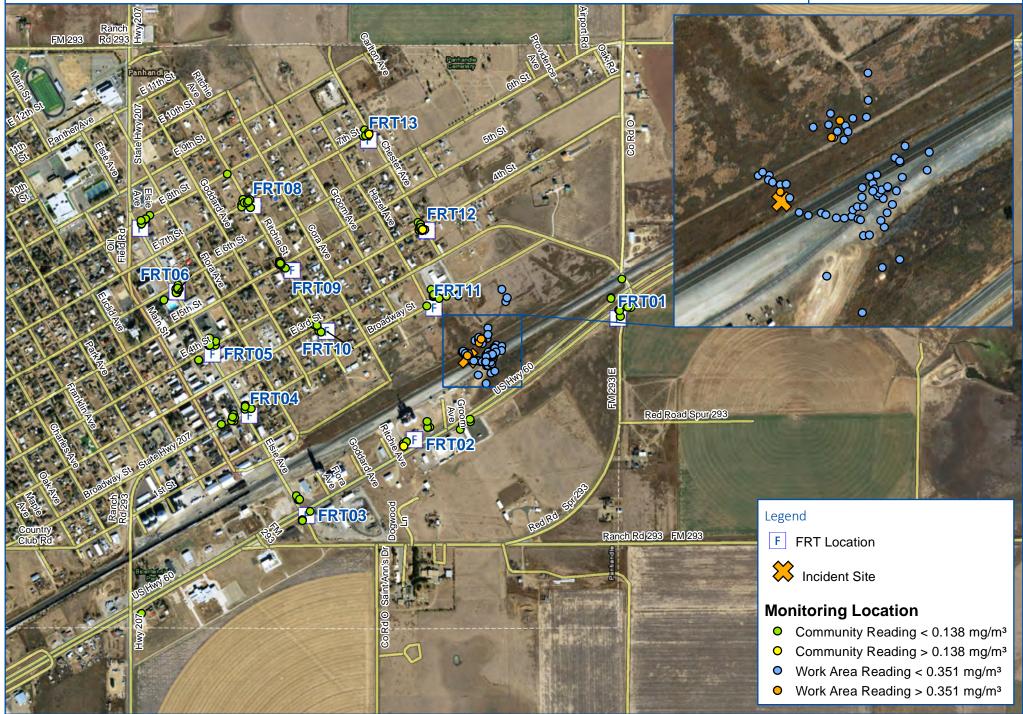








Project: 108231 Client: BNSF City: Panhandle, TX County: Carson



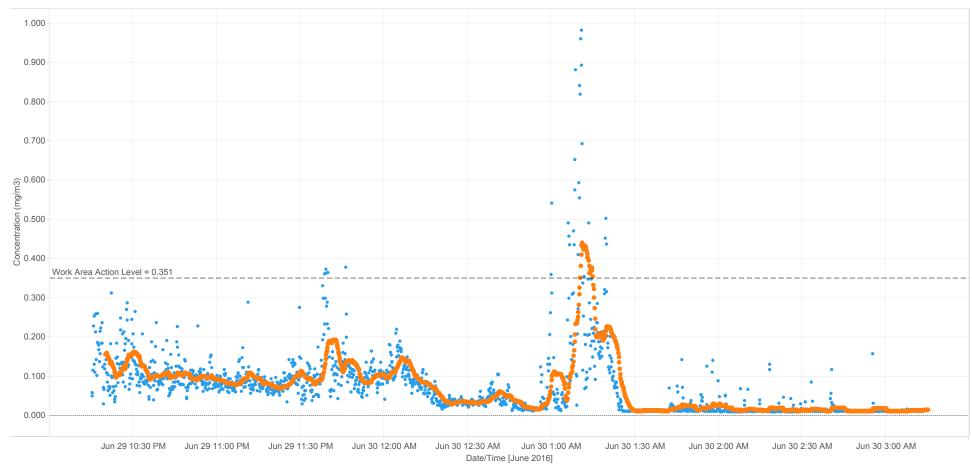


Attachment B:

DustTrak PM_{2.5} Trend Graph

BNSF Collision Response DustTrack Datalog - PM2.5 Location: BNSF Staging (Baseball Field) June 29, 2016 22:15 to June 30, 2016 03:15





Data is considered preliminary and subject to additional QAQC measures

5-min Rolling Avg
Instantaneous



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160628_195630.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.346779
Longitude: -101.368300
Photographer: 11682
Witness: TEDD

Caption: Incident location - West bound railcars



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

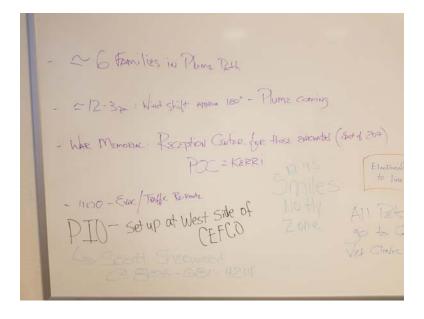
Photo Type: Direction:

Photo Name: 20160628_200606.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.346944
Longitude: -101.368333
Photographer: 11682
Witness: TEDD

Caption: Incident location - West bound engine

1 of 251 4/14/2017 10:46 AM



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160628_194122.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 33.056695 Longitude: -96.841517 Photographer: 11682 Witness: TEDD

Caption: EOC information board



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160628_195650.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.346779
Longitude: -101.368300
Photographer: 11682
Witness: TEDD

Caption: Incident location - Point of impact - Railcars smoldering

2 of 251 4/14/2017 10:46 AM



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160628_195858.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.347359 Longitude: -101.368425 Photographer: 11682 Witness: TEDD

Caption: Incident location - Point of impact - Railcars smoldering



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160628_200605.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.346944
Longitude: -101.368333
Photographer: 11682
Witness: TEDD

Caption: Incident location - West bound engine

3 of 251 4/14/2017 10:46 AM

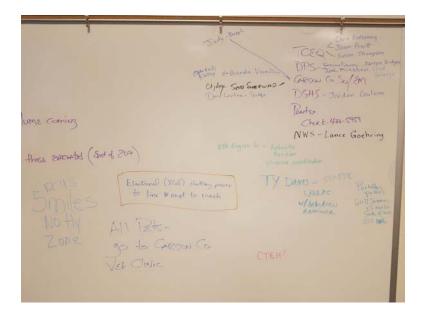


Photo Type: Direction:

Photo Name: 20160628_194131.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 33.056695 Longitude: -96.841517 Photographer: 11682 Witness: TEDD

Caption: EOC information board



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160628_195938.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.347359 Longitude: -101.368425 Photographer: 11682 Witness: TEDD

Caption: Incident location - Smoke migrating north-northwest



Photo Type: Direction:

Photo Name: 20160628_195404 2.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.345967 Longitude: -101.372241 Photographer: 11682 Witness: TEDD

Caption:

Incident location - Point of impact - Railcars smoldering - Eastbound railcars



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160628_195632.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.346779
Longitude: -101.368300
Photographer: 11682
Witness: TEDD

Caption: Incident location - West bound railcars



Photo Type: Direction:

Photo Name: 20160628_195652.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.346779 Longitude: -101.368300 Photographer: 11682 Witness: TEDD

Caption: Incident location - Point of impact - Railcars smoldering



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160628_195939.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.347359
Longitude: -101.368425
Photographer: 11682
Witness: TEDD

Caption: Incident location - Smoke migrating north-northwest



Photo Type: Direction:

Photo Name: 20160628_195850.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.347222 Longitude: -101.368333 Photographer: 11682 Witness: TEDD

Caption: Incident location - Point of impact - Railcars smoldering



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160628_195857.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.347359
Longitude: -101.368425
Photographer: 11682
Witness: TEDD

Caption: Incident location - Point of impact - Railcars smoldering



Photo Type: Direction:

Photo Name: 20160628_195941.jpg
Date and Time: Jun 28 2016 12:00AM

Latitude: 35.347359 Longitude: -101.368425 Photographer: 11682 Witness: TEDD

Caption: Incident location - Smoke migrating north-northwest



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_093347.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.343100 Longitude: -101.368960 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 1



Photo Type: Direction:

Photo Name: 20160629_113638.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.348459 Longitude: -101.371591 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 12



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_113121.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.346723 Longitude: -101.370888 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 11



Photo Type: Direction:

Photo Name: 20160629_093353.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.343100 Longitude: -101.368960 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 1



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_113648.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.348459 Longitude: -101.371591 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 12



Photo Type: Direction:

Photo Name: 20160629_095430.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.340754
Longitude: -101.375765
Photographer: 11682
Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 3



Incident Name: BNSF Train Collision
Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_095407.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.340754
Longitude: -101.375765
Photographer: 11682
Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 3



Photo Type: Direction:

Photo Name: 20160629_094052.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.345581 Longitude: -101.366038 Photographer: 11682 Witness: TEDD

Caption: Point of Impact - East Bound Train



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_102004.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.342885 Longitude: -101.377833 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 4



Photo Type: Direction:

Photo Name: 20160629_111539.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.345875 Longitude: -101.375272 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 7



Incident Name: BNSF Train Collision
Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_102715.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.345279
Longitude: -101.378869
Photographer: 11682
Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 5



Photo Type: Direction:

Photo Name: 20160629_094033.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.345581 Longitude: -101.366038 Photographer: 11682 Witness: TEDD

Caption: Point of Impact - West Bound Train



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_105027.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.348893 Longitude: -101.381327 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 6



Photo Type: Direction:

Photo Name: 20160629_094041.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.345581 Longitude: -101.366038 Photographer: 11682 Witness: TEDD

Caption: Point of Impact



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_094519.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.342500 Longitude: -101.372040 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 2



Photo Type: Direction:

Photo Name: 20160629_113118.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.346723 Longitude: -101.370888 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 11



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_094040.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.345581 Longitude: -101.366038 Photographer: 11682 Witness: TEDD

Caption: Point of Impact - West Bound Train



Photo Type: Direction:

Photo Name: 20160629_111552.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.345875 Longitude: -101.375272 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 7



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_101956.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.343091 Longitude: -101.378696 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 4



Photo Type: Direction:

Photo Name: 20160629_102726.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.345279 Longitude: -101.378869 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 5



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_093400.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.343055 Longitude: -101.368888 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 1



Photo Type: Direction:

Photo Name: 20160629_113114.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.346723 Longitude: -101.370888 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 11



Incident Name: BNSF Train Collision
Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_094032.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.345581 Longitude: -101.366038 Photographer: 11682 Witness: TEDD

Caption: Point of Impact - West Bound Train



Photo Type: Direction:

Photo Name: 20160629_095355.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.340754
Longitude: -101.375765
Photographer: 11682
Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 3



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_094039.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.345581 Longitude: -101.366038 Photographer: 11682 Witness: TEDD

Caption: Point of Impact - West Bound Train



Photo Type: Direction:

Photo Name: 20160629_105039.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.348893 Longitude: -101.381327 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 6



Incident Name: BNSF Train Collision Event Name: BNSF Train Collision

Photo Type: Direction:

Photo Name: 20160629_093348.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.343100 Longitude: -101.368960 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 1



Photo Type: Direction:

Photo Name: 20160629_094458.jpg
Date and Time: Jun 29 2016 12:00AM

Latitude: 35.342500 Longitude: -101.372040 Photographer: 11682 Witness: TEDD

Caption: Fixed Real Time Air Monitoring - 2

Incident Name: undefined undefined Event Name: undefined Photo Type: Direction: undefined Photo Name: undefined undefined Date and Time: Latitude: undefined undefined Longitude: undefined Photographer: undefined Witness: Caption: undefined

Submit Action Report

Spill Summary Report

NATIONAL RESPONSE CENTER 1-800-424-8802

GOVERNMENT USE ONLYGOVERNMENT USE ONLY***

Information released to a third party shall comply with any

applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 1151859

INCIDENT DESCRIPTION

*Report taken by: MST3 STEPHEN COOKE at 10:24 on 28-JUN-16

Incident Type: RAILROAD
Incident Cause: DERAILMENT

Affected Area:

Incident occurred on 28-JUN-16 at 08:25 local incident time.

Affected Medium: BALLAST UNKNOWN AMOUNT OF DIESEL ON BALLAST

REPORTING PARTY

Name: GARY KETCHAM

Organization: BNSF

Address: 2600 LOU MENK DR.

FORT WORTH, TX

PRIMARY Phone: (817)3522832

Type of Organization: PRIVATE ENTERPRISE

SUSPECTED RESPONSIBLE PARTY

Name: GARY KETCHAM

Organization: BNSF

Address: 2600 LOU MENK DR.

FORT WORTH, TX

PRIMARY Phone: (817)3522832

Type of Organization: PRIVATE ENTERPRISE

INCIDENT LOCATION

MP: 524 County: CARSON

SD: PANHANDLE State: TX

RELEASED MATERIAL(S)

CHRIS Code: ODS Official Material Name: OIL: DIESEL

Also Known As:

Qty Released: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

CALLER IS REPORTING A HEAD ON COLLISION BETWEEN TWO LOCOMOTIVES DUE TO UNKNOWN CAUSES. THERE IS AN UNKNOWN AMOUNT OF DIESEL FUEL THAT DISCHARGED ONTO THE BALLAST. THREE LOCOMOTIVES HAVE BEEN DESTROYED WITH AN UNKNOWN

AMOUNT OF RAILCARS DERAILED.

INCIDENT DETAILS

Grade Crossing: NO

Location Subdivision: PANHANDLE

Railroad Milepost: 524
Type of Vehicle Involved:
Crossing Device Type:
Device Operational: YES
DOTCrossing Number:

Date and Time Service was/will be Restored:

Brake Failure: UNKNOWN

Federal Post-Accident 219.201 Sub Part C Testing Required: YES

Counts and Types of Employees Tested are UNKNOWN

Passenger Train Route: NO

Passenger Train Delay Expected: NO Passenger Train Delay Handling:

---RAILROAD INFORMATION---Railroad Involved: BNSF Train Number: QCHISBD627

Train Type: FREIGHT Train Direction:

Train Speed: Track Speed: Locomotives: Cars: Derailed:

Suspected DOT Regulation Non Compliance: UNKNOWN DERAILED CARS:

Carnumber Pos. Type Cargo

---RAILROAD INFORMATION---Railroad Involved: BNSF Train Number: SLACLPC126

Train Type: FREIGHT Train Direction:

Train Speed: Track Speed: Locomotives: Cars: Derailed:

Suspected DOT Regulation Non Compliance: UNKNOWN DERAILED CARS:

Carnumber Cargo Pos. Type

IMPACT

Fire Involved: YES Fire Extinguished: NO

INJURIES: YES 4 Hospitalized: 1 Empl/Crew: Passenger: 0 FATALITIES: UNKNOWN Empl/Crew: Occupant: Passenger:

EVACUATIONS: NO Who Evacuated: Radius/Area:

Damages: UNKNOWN

Hours Direction of

Closure Type Description of Closure Closed Closure

Air:

N

Major Road: N

Artery: N

Waterway:

Track: MAIN TRACKS E/W

Passengers Transferred: NO Environmental Impact: UNKNOWN

Media Interest: UNKNOWN Community Impact due to Material:

REMEDIAL ACTIONS

WILL CONTACT AN ENVIRONMENTAL RESPONSE CONTRACTOR TO HANDLE THE DIESEL RELEASE.

Release Secured: NO Release Rate:

Estimated Release Duration:

WEATHER

ADDITIONAL AGENCIES NOTIFIED

Federal: State/Local:

State/Local On Scene: State Agency Number:

NOTIFICATIONS BY NRC

CENTERS FOR DISEASE CONTROL (GRASP) 28-JUN-16 10:40 (770) 4887100 NATIONAL COORDINATING CTR FOR COMMS (NCC COMM-ISAC) 28-JUN-16 10:40 (703)2355626 DHS TEXAS FUSION CENTER (INTELLIGENCE OFFICERS) 28-JUN-16 10:40 (202)3068204 DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE) 28-JUN-16 10:40 (202)3661863 FEDERAL RAILROAD ADMIN. (MAIN OFFICE) 28-JUN-16 10:43 (202)4936242 TALLY FEDERAL RAILROAD ADMIN. (ACCIDENT AND ANALYSIS BRANCH) 28-JUN-16 10:43 (817) 9141723 TALLY EPA HQ EMERGENCY OPERATIONS CENTER (MAIN OFFICE) 28-JUN-16 10:40 (202) 5643850 EPA OEM (MAIN OFFICE) 28-JUN-16 10:49 (202) 5643850 FAULKNER U.S. EPA VI (MAIN OFFICE) 28-JUN-16 10:44 (866) 3727745 BERNEAR USCG NATIONAL COMMAND CENTER (MAIN OFFICE) 28-JUN-16 10:40 (202) 3722100 JFO-LA (COMMAND CENTER) (225) 3366513 28-JUN-16 10:40 NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE) 28-JUN-16 10:40 (202) 2829201 NOAA RPTS FOR TX (MAIN OFFICE) 28-JUN-16 10:40 (206) 5264911 NATIONAL RESPONSE CENTER HQ (MAIN OFFICE) 28-JUN-16 10:40 NATIONAL RESPONSE CENTER HQ (AUTOMATIC REPORTS) 28-JUN-16 10:40 (202)2671136 NRC COMMAND DUTY OFFICER (MAIN OFFICE) 28-JUN-16 10:51 (202)2672100 CARTER NTSB RAIL (MAIN OFFICE) 28-JUN-16 10:40 (202) 3146293 HOMELAND SEC COORDINATION CENTER (MAIN OFFICE) 28-JUN-16 10:40 (202)2828300 PIPELINE & HAZMAT SAFETY ADMIN (OFFICE HAZARDOUS MATERIALS) 28-JUN-16 10:50 (202)3661863 CARTER PIPELINE & HAZMAT SAFETY ADMIN (OFFICE HAZARDOUS MATERIALS FAX#2) 28-JUN-16 10:40 (202) 3661863 SAN ANTONIO POLICE DEPT (SOUTHWEST FUSION CENTER (SWFC)) 28-JUN-16 10:40 (210)2077680 TCEQ (MAIN OFFICE) 10:40 (800)8328224 28-JUN-16 TCEQ (REGION 1) 28-JUN-16 10:40 (512) 2392507 TEXAS DEPARTMENT OF TRANSPORTATION (RAIL SAFETY SECTION) 10:40 (512) 4163244 28-JUN-16 TEXAS FUSION CENTER (COUNTER TERRORISM) 28-JUN-16 10:40 (866) 7865972 TEXAS STATE OPERATIONS CENTER (COMMAND CENTER) 28-JUN-16 10:40 (512)4242208 USCG DISTRICT 8 (MAIN OFFICE) 28-JUN-16 10:40 (504) 5896225 USCG DISTRICT 8 (PLANNING) 28-JUN-16 10:40 (504) 6712080

ADDITIONAL INFORMATION

IT IS ESTIMATED THAT A FEW THOUSAND GALLONS OF DIESEL HAS BEEN RELEASED, BUT QUANTITIES ARE UNKNOWN AT THIS TIME. THERE ARE THREE RAIL EMPLOYEES MISSING AT THIS TIME, THEIR HEALTH AND WELL BEING IS UNKNOWN. INITIAL DAMAGE ESTIMATES WILL EXCEED A MILLION DOLLARS.

*** END INCIDENT REPORT # 1151859 ***
Report any problems by calling 1-800-424-8802
PLEASE VISIT OUR WEB SITE AT http://www.nrc.uscg.mil

Close Window

=DEFYING= MOTHER NATURE™

SINCE 1916



All components of this product are recyclable

Rite in the Rain —

A patented, environmentally responsible, all-weather writing paper that sheds water and enables you to write anywhere, in any weather.

Using a pencil or all-weather pen, Rite in the Rain ensures that your notes survive the rigors of the field, regardless of the conditions.

© 2015 JL DARLING LLC Tacoma, WA 98424-1017 USA www.RiteinthcRain.com

Item No. 391FX ISBN: 978-1-60134-188-4

Made in the USA US Pat No. 6.863.940



Rite in the Rain.
ALL-WEATHER
JOURNAL

Nº 391FX

BNSF Panhandle Derailment

Vo# Zerto6.0/2.001.10/9.01

Westen Solutions, Inc.

3900 Dallas Ptwy. Suite 175

Plano, Tx 75093

Book 1 of





Name



JOSE L. OJEDA

SENIOR PROJECT LEADER START TEAM

The Trusted Integrator for Sustainable Solutions

Weston Solutions, Inc. Suite 175 3900 Dallas Parkway Plano, TX 75093

469-666-5506 cell: 619-417-3298 fax: 469-666-5540 jose.ojeda@westonsolutions.com www.westonsolutions.com

an employee-owned company &

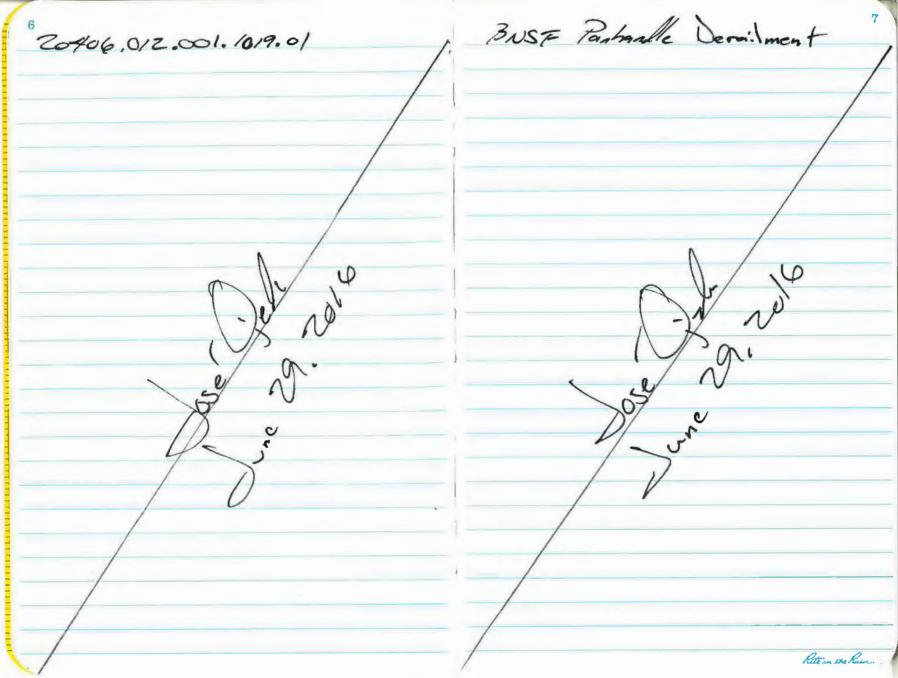


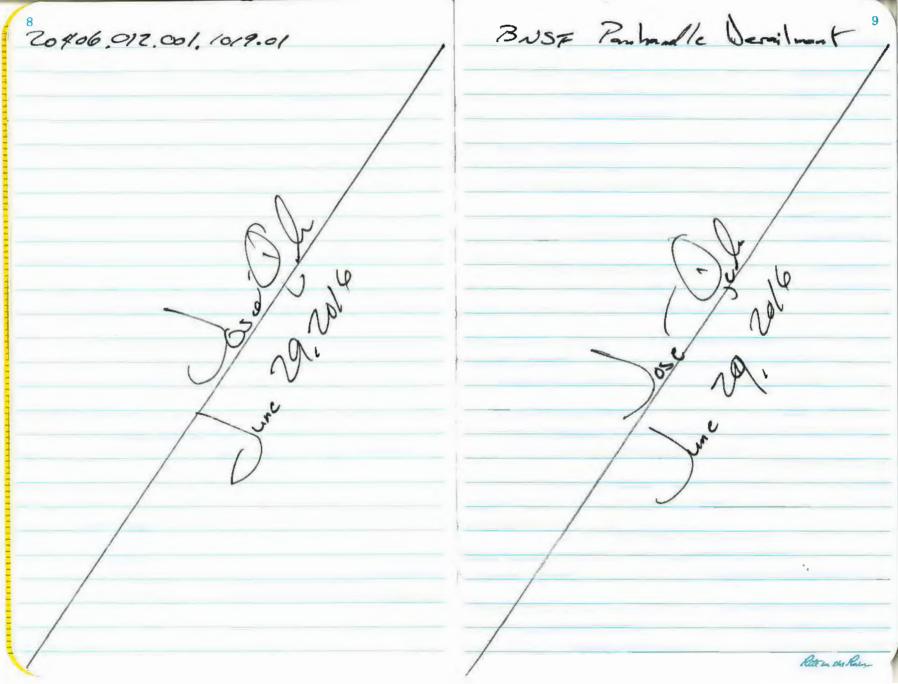
CONTENTS

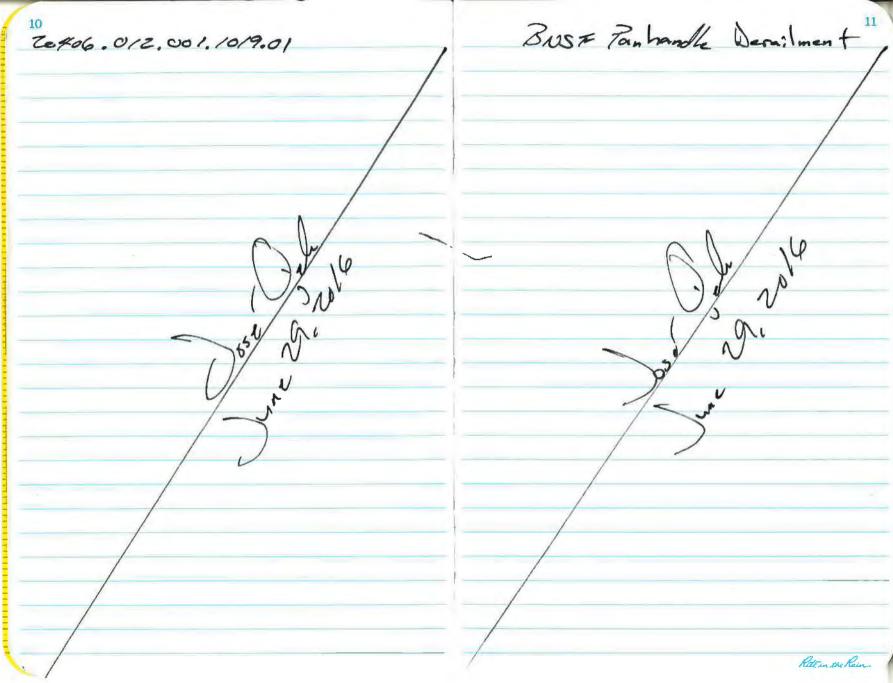
PAGE	REFERENCE	DATE
57	ART- 3 PTL DOR Gada	

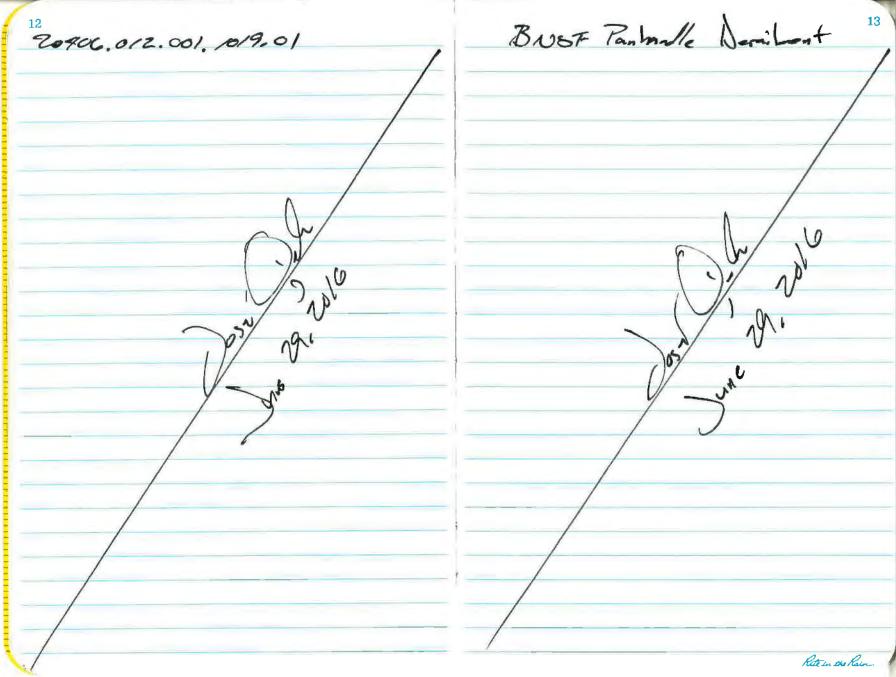
Brusz Rahandle Derailment 3 BUSI Penhandle Derailment 204.06.012.001.10M.01 June 28 2016 Une 28 2016 Zetto6.013.001.1019.01 13/9 Depart Wester Office to Clo? -- de Working on smoldering cars. High PM Levels found downwind 1324 Arrive & Coop + land Viger System; - or CTEH will have 24 hr monterry. Firefighters will -} L ApenRAES; I VRAE; Z Hazdust; 2 Az5 Bulges remain overnight, cannot wreek yet due to investigation 1 Oretyer Kit -/ chips. How will have howy averages PM 2.5, PM 10. - & 1345 Exit Coop. Begin drive to incident -CTEH rey O.J. Fogleman 501-813-6591, and Dr. Poul The Nony toxicologist. 501-352-3131 -START-3 Parsonnel: Joré Cal- & Oscur Garaia EPA: OSC Bill Rhotonberry - de Current Orite Contact: 2030 OSC Rhotenbury spoke with local EOC rep - de we will neet at some gout center at 0,000. - de 2050 EPA Team deports incident site, to EOC . - for TEEG Susan Thompson 806-517-0912 - or Railroad Gary Ketcham F17-352-2832 - dr 2115 Started MultiRAE, would initialized both for Patalians. 1929 Arrive a Carson County law Enforcement Center in Pankandle, TX 2130 Fresh air cal MUHIRAE. All seasons PASS. - dr 1933 Met at command post with OSC Rhotenberry, Oxy 18%. 18%. LEL 50). 49%. All PASS. - I 10.0 pp. 11.3 pp. dr TCEQ Chris Poderny 806-468-0519; Jason Truitt 806 468 0513; Susan Thompson 806-152-517. -0977; DPS Joe Minshew & Chad Grange; DSHS VOC PASS, Isobutylene 100 ppm. 110.3 ppm .- dr 2142 MWHRAE 23798 All gensors PASS. - de Jordan Coulson; County Afterney Scott Sherward is the PIO; NWS Lance Goehring; Pontex, Chuck 2144 Started running both DataRAMS. - or 477-5959; Ty Davis, works with anhydrous ammonia; 2150 Wester: parts cloudy &2°F, 15% chance precip. 1946 Departed good certer with OSC Rhotenberry. humidity 48%, wind SE 1/ mph; Forcest: sustend 1935 Arrived northwest side of incident. thunderstorms at 0700 tomorrow, 6/29/10. 612 760 1365 Derrick Lamkin. - dr. 2225 EPA team departs EOC to community - of 2008 Met Derrick Lunkin, BNSF Haznat. Met -d locations to took DataRAMS, NOITH 5H St, and Grown St.; Messured 0.03 mg/m, and 1.60 mg/m two CTEH reprodutations. 14 real time locations throughout community set up. Winds have changed at next street corner. Both max readitys. recently towards residences; workers actively - or

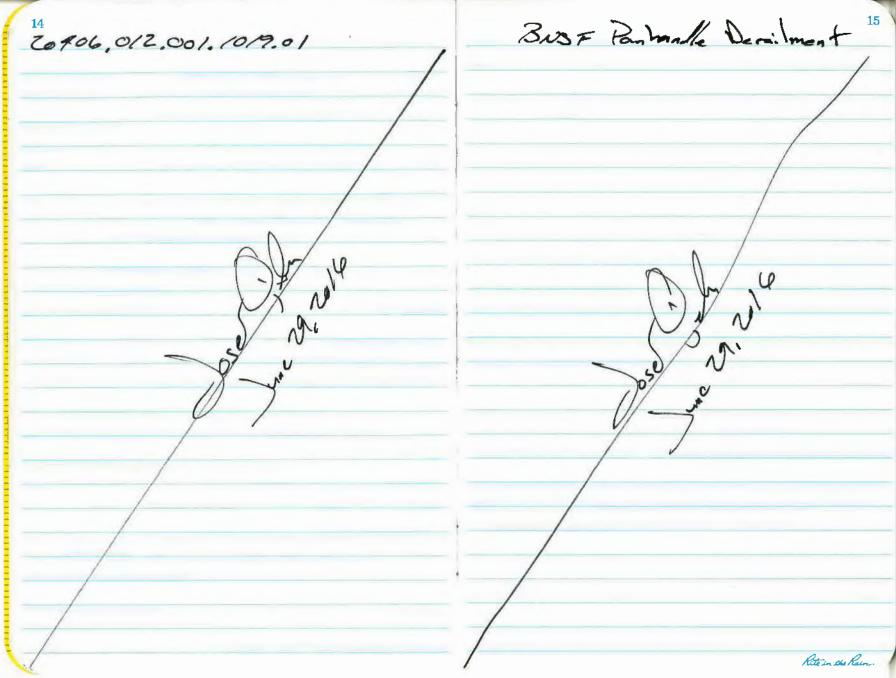
BNST Panhandle Derailment BUSE Panhandle Derailment 20406.0/2.001.109.01 June 29 2016 June 29 2016 20966.012.001.1019.01 0750 EPA Team diparted, hotel, - de 124 Rhotoberry in CTEH trailer, discuss progress. 0800 Arrived of EOC and anxited local regs. or Doug Mckeynolds BNSF point of contact, 817-304-2031 0045 Starled datarans, initiatized and running. --1220 Notes from CTEH oir monitoring round : their Multi-RAE calibration menitor was consistently reading -0.000 mg/m2 higher than Fresh air cal PASS, and All Sensons PASS, It our dotarrans. Josh said may need to clean his 0xy 18% LEL 50% manitors inlet tube. co so pm H2S 10.1 pm - 20 1230 EPA Jean offsite. VOC Isobutyline 100.1 - dr 1930 Acrived at DTX office. -09/8 Arrived omite with TCOO Suson and Jason. End of Logbout. met with CTEH. BJ Fogleman. ____ de Business cards on page 48 -0930 Ride with CTEH Josh, with 2 data RAMS, first location off of highway. Id. FRT 1, .003 mg/m avg 0942 FATZ, .006 mg/m3 ang 0953 FRT3, .002 mg/m3 avg - dr 1012 FRTY, 003 ms/m' aug - 2 1027 FRTS, .007 my/m3 avg. 1033 FRTb. .005 mg/m3 aug - TCEO departs from 1042 FRT7, .003 mg/m3 aug our mondering round-1055 FRT8, .004 mg/m3 45 1108 FRT 9. . 001 mg/m3 avg 11/6 FRT 10, . 005 mg/m3 arg 1127 FRT 11, . 002 mg/or any 1136 FRT 12, . 003 mg/n2 mg 1/46 FIT 13, ,002 mg/m an 1200 Met at CTEH trailer, - - -Rete in the Rees

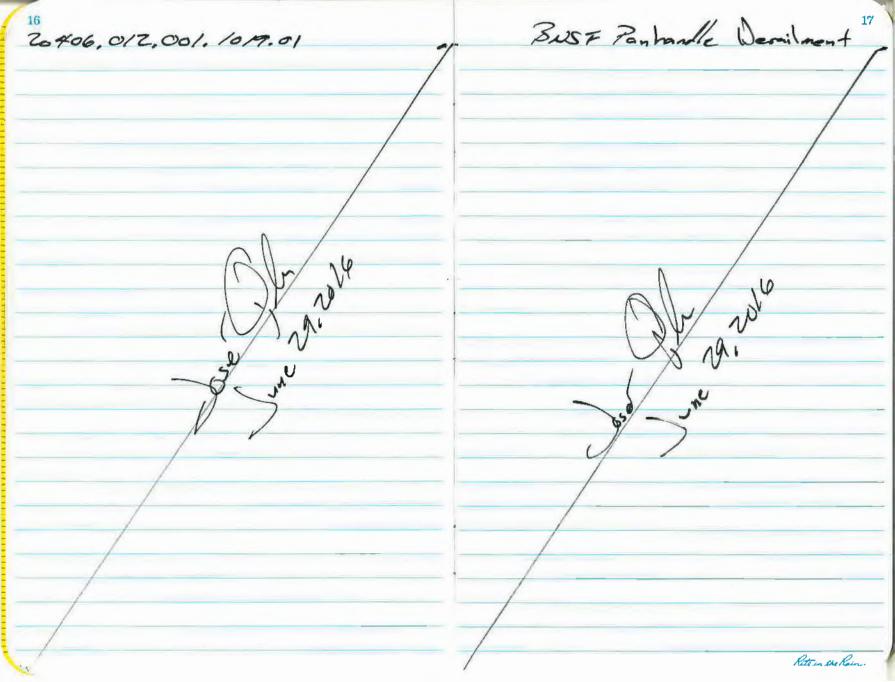


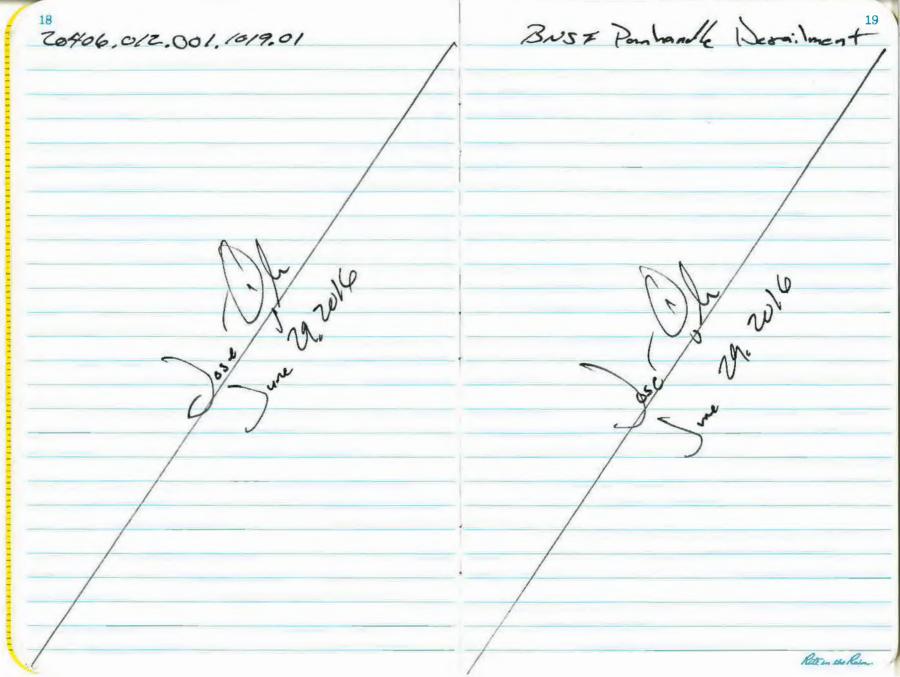


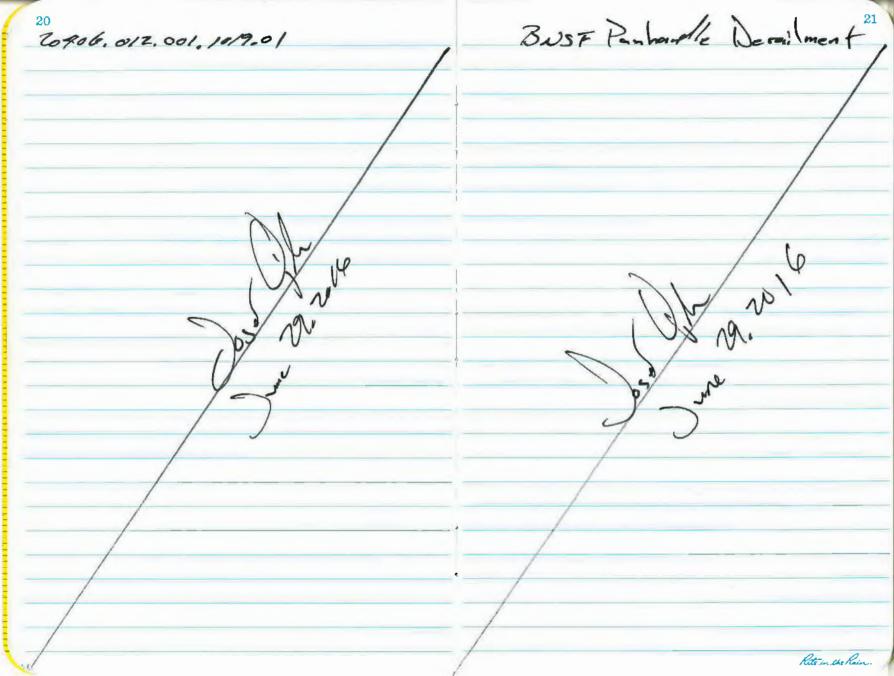


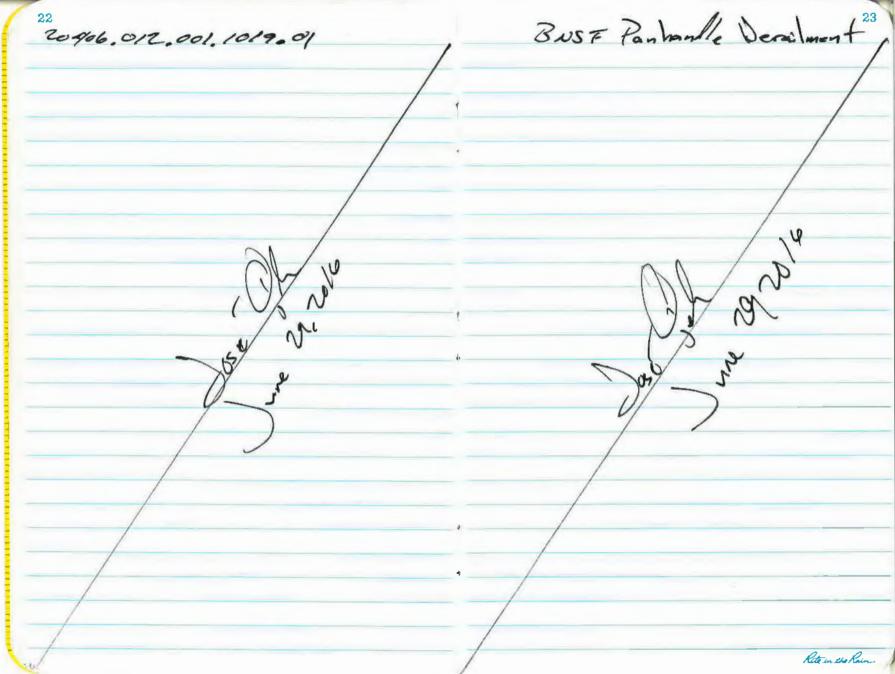


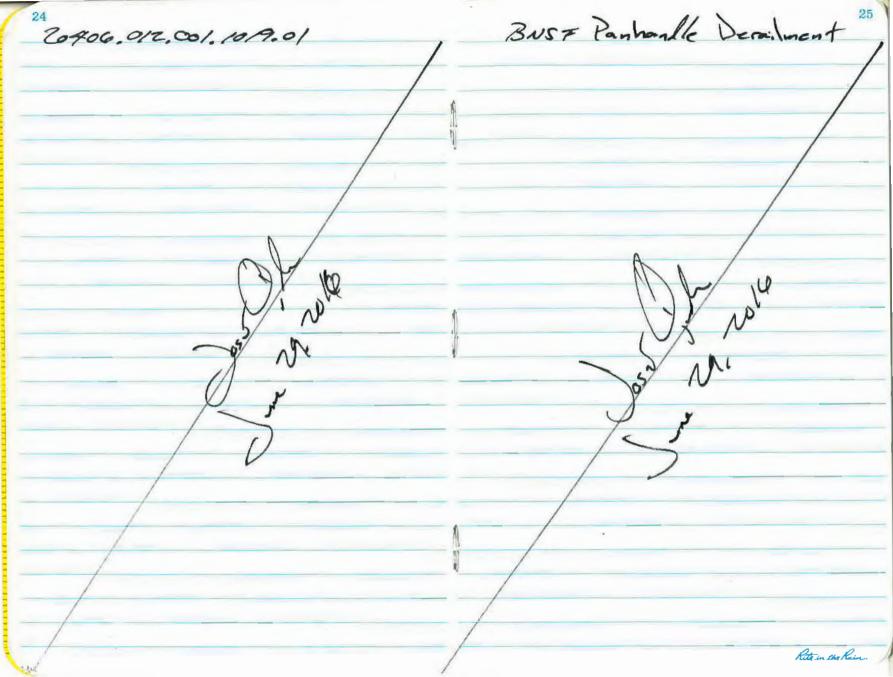


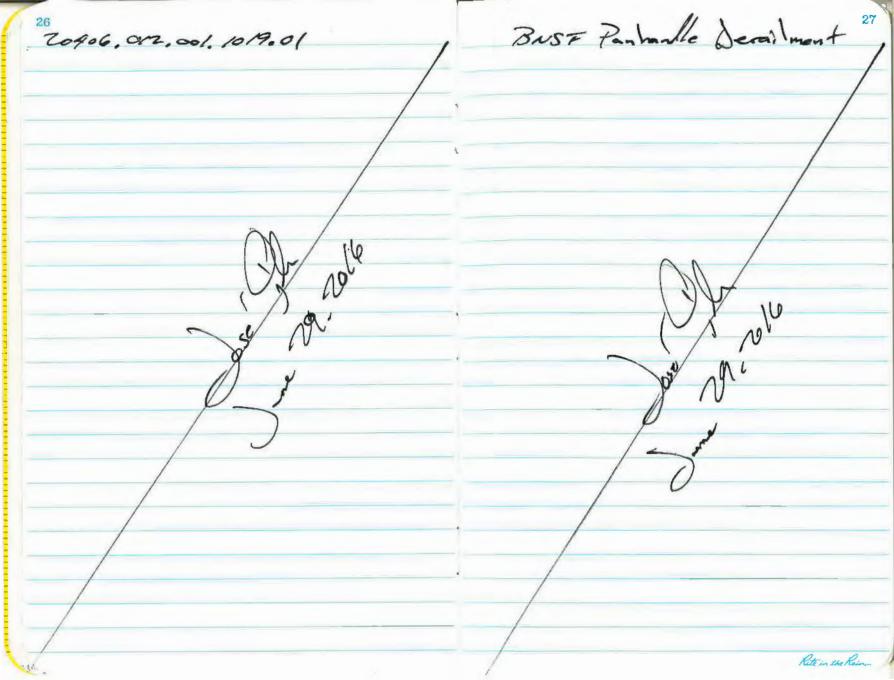


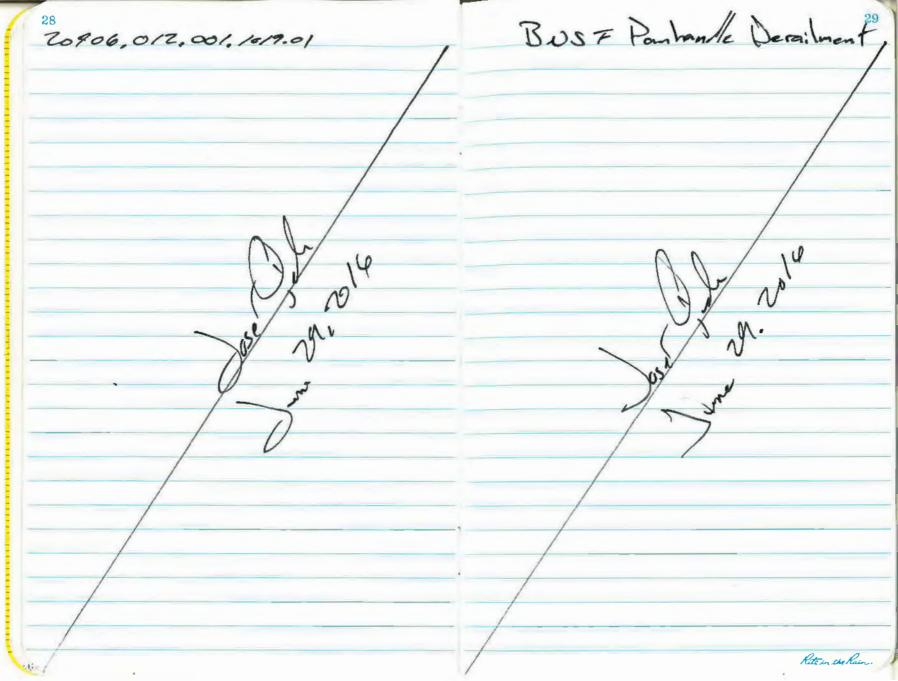


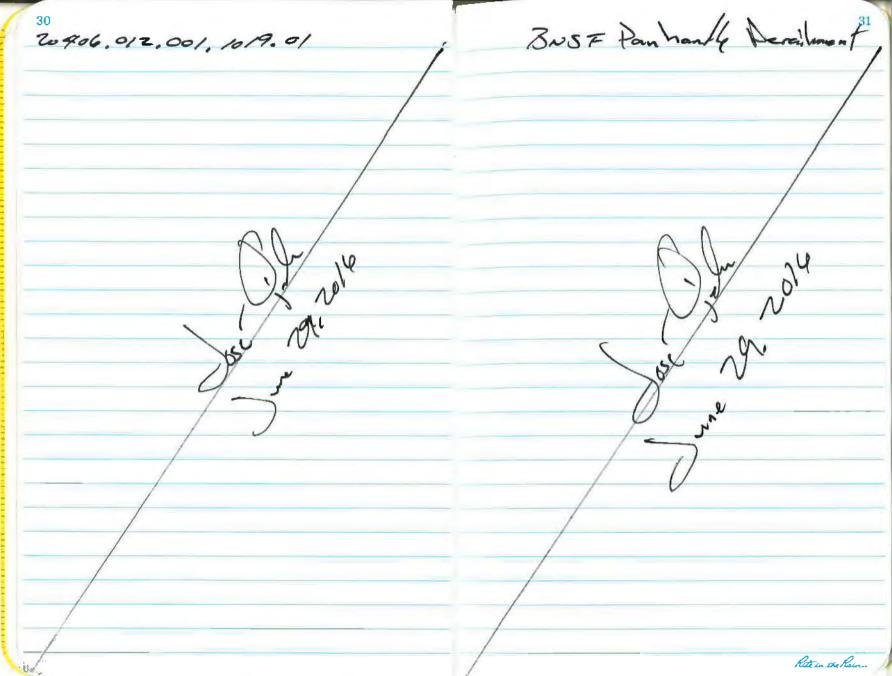


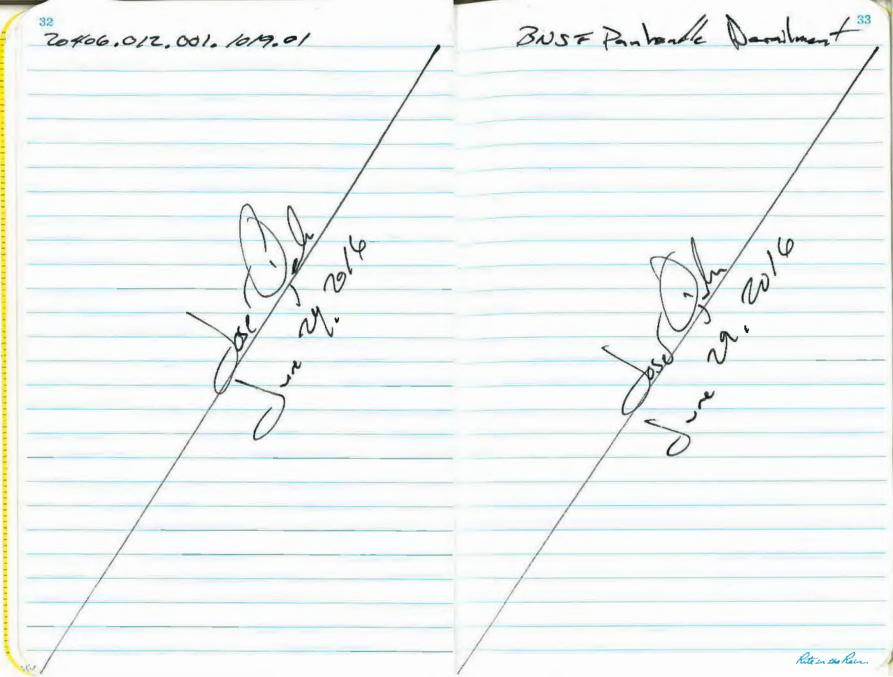


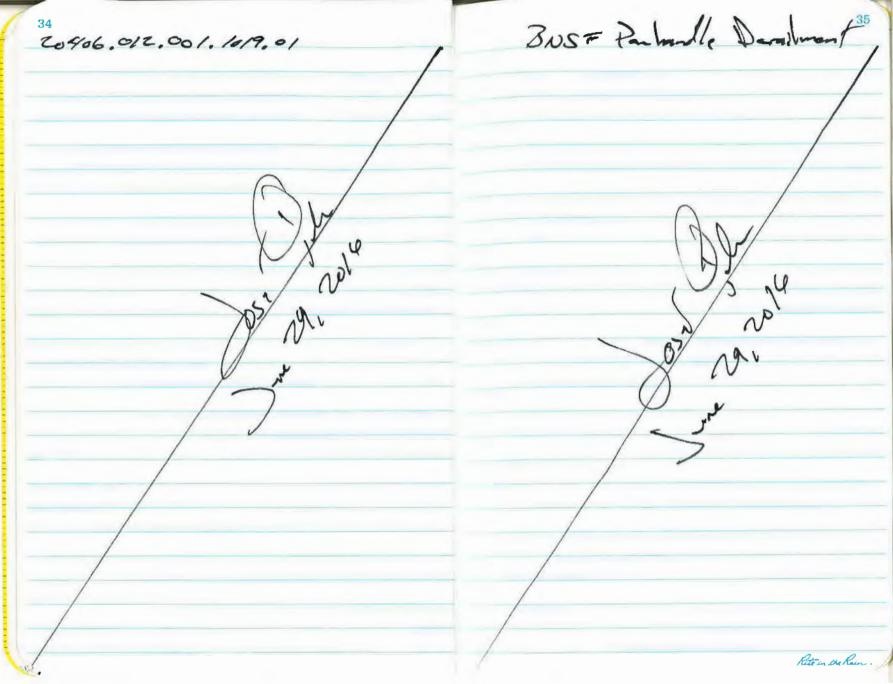




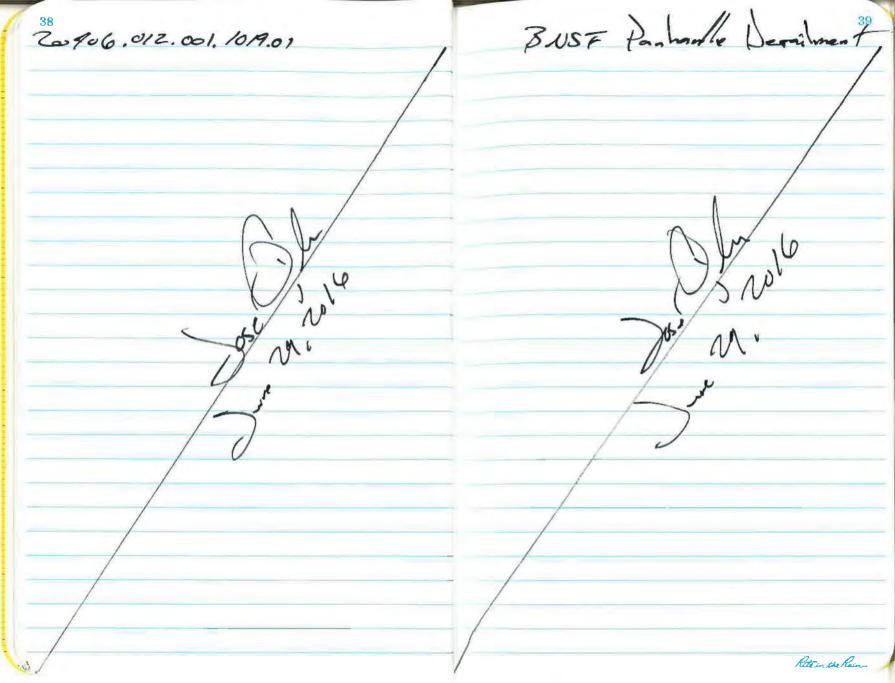


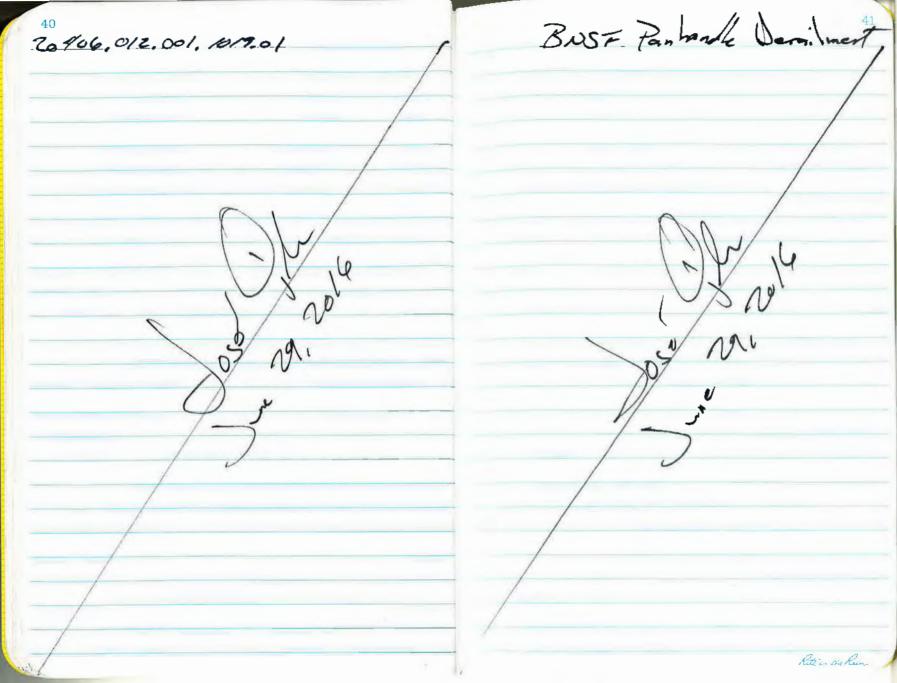


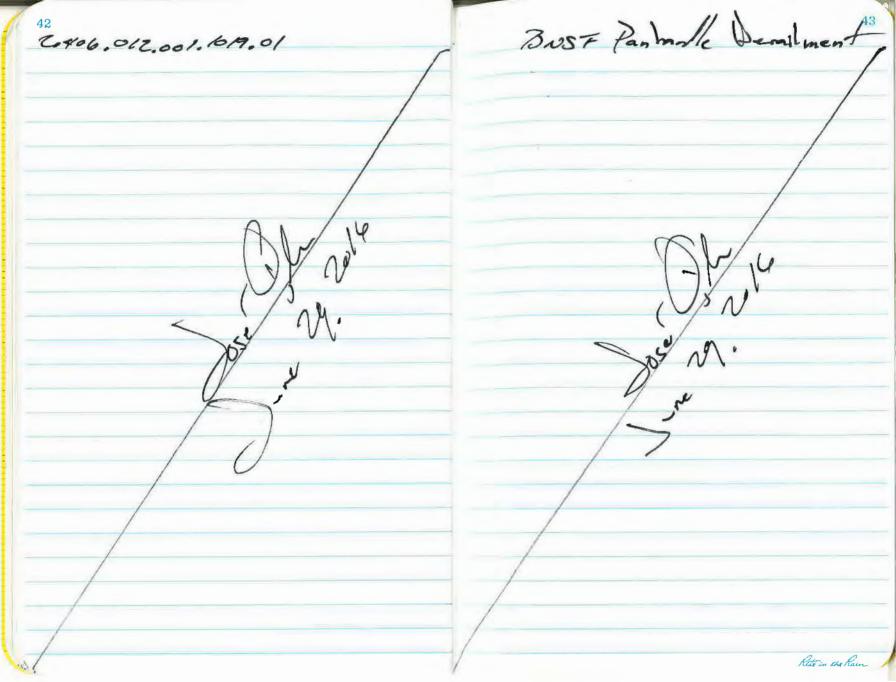


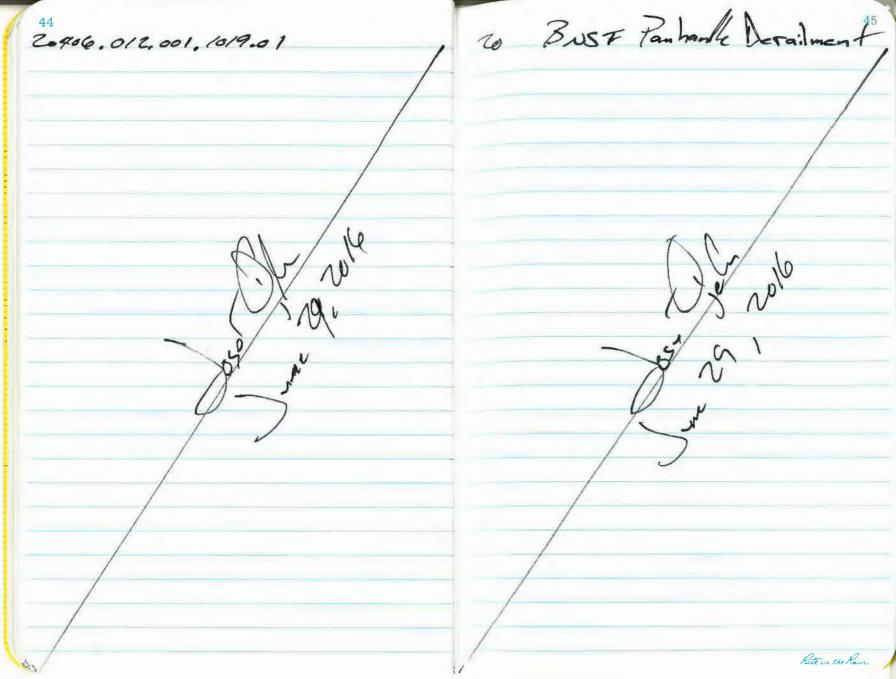


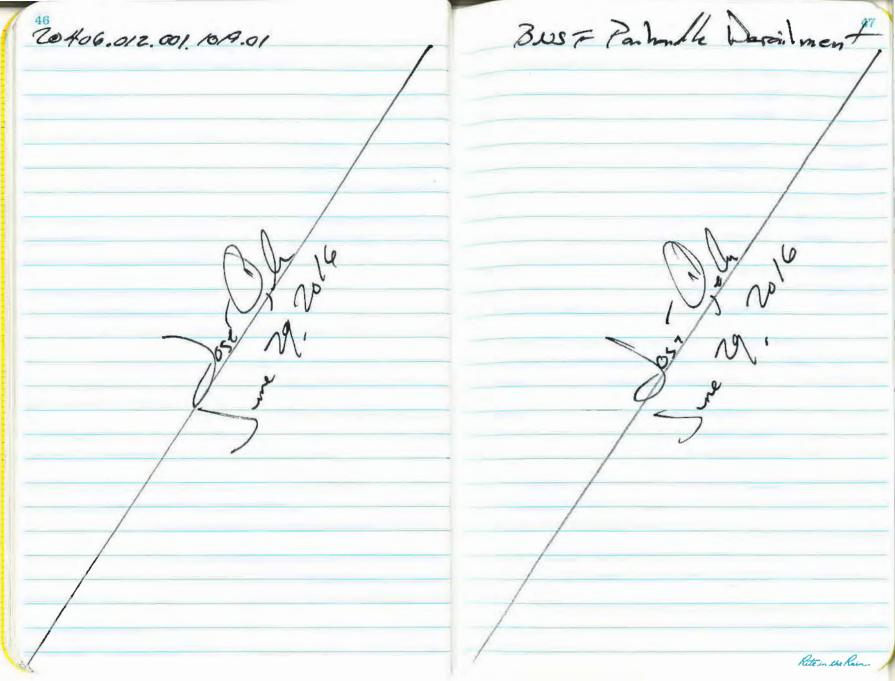












CHRIS PODZEMNY

Environmental Investigator Field Operations Division

Region 1 . Amarillo



Texas Commission on Environmental Quality

3918 Canyon Drive, Amarillo, TX 79109 Direct: 806/468-0519 Office: 806/353-9251

Fax: 806/358-9545

christopher.podzeniny@tceq.texas.gov

printed on secvoled paper

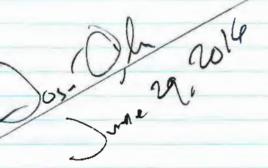


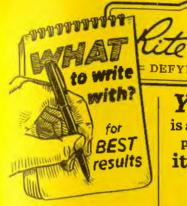
CENTER FOR TOXICOLOGY AND ENVIRONMENTAL HEALTH, LLC

Bradley J. Fogleman

Environmental Scientist TERP Project Manager

5120 Northshore Drive ■ North Lillle Rock, AR 72118 t: 501.801.8669 e c: 501.813.6591 bfogleman@cteh.com





USE WET OR DRY

grost pens stop writing when well

- · ALL PENCILS
- · RITE IN THE RAIN PENS
- WAX MARKERS
- · CRAYONS
- · OIL PASTELS / PAINT

WHEN DRY ONLY what you write won't wash off

PERMANENT MARKERS STANDARD BALLPOINTS

WON'T WORK

water-based inks bead off sheet

- GEL PENS
- MOST HIGHLIGHTERS
- FOUNTAIN PENS
- ACRYLIC PAINT

- WATER COLORS

MADE IN TACOM - SINCE 1918 DEFYING MOTHER NATURE =

Yes, Rite in the Rain is a wood-based & recyclable paper, but unlike plain paper... it won't turn to mush when exposed to:













mishap



storme

The Rite in the Rain story began nearly a century ago in the forests of the Great Northwest, Entrepreneur, Jerry Darling, recognized the logging industry's need for a durable material that could be written on and survive in poor weather conditions. Jerry developed a special coating that created a unique moisture shield on the hand-dipped sheets of paper that he and his wife. Mary, processed at their home.

From humble beginnings our first all-weather paper was born! Over the many years we've perfected and patented our environmentally responsible coating process. Still located in Tacoma, our continued mission is to provide Innovative products for professionals and enthusiasts who brave the outdoors.

EQUIPPING MULTIPLE INDUSTRIES WORLD-WIDE



other product styles available



BOUND BOOKS



& PLANNERS



LOOSE LEAF



WRITING INSTRUMENTS



PRINTER / COPIER **BLANK SHEETS**











U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT BNSF Panhandle Derailment - Removal Polrep Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region VI

Subject: POLREP #1

Initial

BNSF Panhandle Derailment

Panhandle, TX

Latitude: 35.3468044 Longitude: -101.3654968

To: Reggie Cheatham, Office of Emergency Management

Ronnie Crossland, Superfund Division

Anthony Buck, TCEQ ER

From: William Rhotenberry, FOSC

Date: 6/29/2016 **Reporting Period**: 6/28-29/2016

1. Introduction

1.1 Background

Site Number: A6NJ Contract Number: D.O. Number: Action Memo Date:

Response Authority: CERCLA Response Type: Emergency

Response Lead: EPA Incident Category: Removal Assessment

NPL Status: Non NPL Operable Unit:

Mobilization Date: 6/28/2016 **Start Date:** 6/28/2016

Demob Date: 6/29/2016 **Completion Date:**

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

1.1.1 Incident Category

This incident is an Emergency Response due to fire from locomotive engines involved in the collision, resulting in a smoke plume with potential impacts to the town of Panhandle, as well as damage to two railcars containing hazardous materials. BNSF Railway is the Responsible Party (RP).

1.1.2 Site Description

On 28 June 2016 at approximately 0825 CST, two BNSF Railway (BNSF) freight trains collided in Panhandle, Carson County, Texas on the main line known as the Southern Transcon. Initial information received in the National Response Center (NRC Report #1151859) reported an unknown amount of diesel fuel spilled onto the ballast of the rail line. An incident update by BNSF and the Texas Commission on Environmental Quality (TCEQ) reported diesel from the locomotive engines involved in the incident were

burning, with no emergency evacuations or road closures initiated in the area. Due to a weather change at the incident, the smoke plume changed to a northwesterly direction and an evacuation of the area was conducted. Three BNSF personnel are unaccounted for and presumed dead by the Texas Department of Public Safety.

1.1.2.1 Location

The Site is located in Panhandle, TX in Carson County, at 35.3468044°, -101.3654968°. The rail line known as Southern Transcon runs east/west, and is located north of Hwy 60.

1.1.2.2 Description of Threat

Burning diesel from the four locomotive engines (two engines per train), and burning commodities from damaged intermodals caused a plume of smoke to impact the incident location. Changing onsite weather conditions, and changing wind direction prompted an evacuation of a residential area located northnorthwest of the incident location. Spilled diesel from the locomotive engines impacted the ballast located on the rail line right of way, soil, and vegetation. No visible impact to water was observed.

The westbound train derailed two locomotives and six railcars. The 6 damaged railcars contained mixed commodities with no hazmat listed on railroad documents. There were 4 railcars containing hazmat that were unaffected.

The eastbound train derailed two locomotives and nine railcars. Railcars 3 and 7 were listed as hazmat on railroad documents. Railcar 3 was listed as UN1866, resin solution (resin solution flammable), and railcar 7 was listed as UN1325, flammable solid, organic, N.O.S. (aluminum). The remaining damaged railcars were listed as mixed commodities with no hazmat listed on railroad documents. The east bound train had 3 other hazmat railcars that were unaffected.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The EPA and START Contractors arrived in Panhandle, TX at the Carson County Law Enforcement Center at approximately 19:29 on 28 June 2016, and met with Susan Thompson, Jason Pruitt, and Chris Podzemny, Environmental Investigators for the TCEQ Amarillo Region 1 Office. An incident briefing was conducted with the EPA Team, and then the teams proceeded to the incident location.

At the incident location, the EPA Team met with Derrick Lamkin, BNSF representative, and their environmental contractors, CTEH. CTEH described the current air monitoring and sampling operations, which included hourly air monitoring from 13 locations (10 north of Hwy 60, 3 south of Hwy 60) for:

- VOC
- PM 2.5
- CO
- NO
- SO₂

and hourly Air sampling from 4 locations (3 north of Hwy 60, 1 south of Hwy 60) for:

- Aldehydes
- Metals
- PAHs
- VOCs

EPA reviewed the data collected to that point by CTEH. Particulates appeared to be the only potential contaminant of concern. The EPA Team proceeded to locations north of Hwy 60 (directly downwind of incident) to conduct air monitoring utilizing two DataRAM 4TM Particulate Monitors. Particulate readings ranged from 0.03 mg/m³ to 1.60 mg/m³. Prevailing winds were gusting and there were no sustained readings.

On 29 June 2016, the EPA Team and TCEQ Environmental Investigators accompanied CTEH personnel to

conduct air monitoring concurrently at the 13 Fixed Real Time (FRT) monitoring locations. Average particulate readings for the locations ranged from 0.001 to 0.007 milligrams per cubic meter.

At 13:00 on 29 June a discussion was held with BNSF regarding remaining environmental issues. The fire was completely out and there were no remaining air issues related to the fire. Impacted soils from the diesel discharged or from various commodities whose containers were breached and spilled will be excavated, sampled and sent to either a local non-hazardous landfill or to a designated hazardous waste facility per TCEQ instructions and oversight. The condition of the railcar containing the aluminum material will be assessed once BNSF is able to access it.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

The EPA Team departed the site on 29 June 2016.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

BNSF Railway is the Responsible party

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

2.2 Planning Section

2.2.1 Anticipated Activities

BNSF will excavate, sample and properly dispose of all contaminated soils. BNSF will access and take steps to mitigate any releases from the railcar containing the Aluminum material. Air monitoring activities will continue while soil excavation/disposal activities are ongoing.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

2.2.2 Issues

None

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

TCEQ

Carson County Emergency Management

4. Personnel On Site

Agency Personnel;

- 1 EPA FOSC
- 2 Weston Solution START Contractors
- 3 TCEQ investigators
- 2 NTSB Investigators

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

Page 1 Of 2

SFO:

U.S. EPA, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

Vendor: WESTON SOLUTIONS, INC.

TDD Title: BNSF Panhandle Derailment

Purpose: TDD INITIATION

 $\textbf{Priority}: {}^{\texttt{HIGH}}$

Overtime Authorized: Yes Invoice Unit:

SSID: A6NJ

Project/Site Name: BNSF Panhandle Derailment

Project Address : City of Panhandle

County: Carson City: Panhandle State : $\ensuremath{\mathbb{T}} X$

Zip Code: 79068

TDD #: 1/WESTON-042-16-023

Amendment #:

Contract #: EP-W-06-042

Verbal Date: 06/28/2016

Start Date: 06/28/2016

Completion Date: 08/15/2016

Effective Date: 06/28/2016

Work Area: Response / Removal

Work Area Code : $\ensuremath{^{\text{RS}}}$

Activity: Fund Lead Removal

Activity Code : ${\sf RV}$ Operable Unit: Emergency Code:

Performance Based : $^{\text{No}}$

Authorized TDD Ceiling :	Amount	LOE (Hours)
Previous Action(s):	\$0.00	0.00
This Action :	\$12,000.00	0.00
New Total :	\$12,000.00	0.00

Specific Elements:

See Schedule

Description of Work:

See Schedule

Region Specific:

CERCLIS:: Misc 2:

Line	Budget / FY	Approp	Budget	Program Flement	Object Class	Site Project	Cost	DCN Line-ID	Funding Category	TDD Amount
1	16	Т	6A00	303DC6	2505	06WQRV00	C001	166ARVC012-001	REMOVAL	\$12,000.00

U.S. EPA, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

Vendor: WESTON SOLUTIONS, INC.

TDD #: 1/WESTON-042-16-023

Amendment #:

Contract #: EP-W-06-042

Project Officer :	Will LaBombard		Branch Mail Code:	
			Phone Number :	214-665-7199
	(Signature)	(Date)	Fax Number :	
Contracting Officer Re	epresentative William Rhoten	Branch Mail Code :		
			Phone Number :	214-665-8372
	(Signature)	(Date)	Fax Number :	
Contract Specialist:	Michael J. Pheeny		Branch Mail Code :	
			Phone Number :	214-665-2798
	(Signature)	(Date)	Fax Number :	
Contracting Officer :	Michael J. Pheeny		Branch Mail Code :	
Electronically	Signed by Michael J. Pheeny	07/11/2016	Phone Number :	214-665-2798
	(Signature)	(Date)	Fax Number :	
Other Agency Official			Branch Mail Code :	
			Phone Number :	
	(Signature)	(Date)	Fax Number :	

Specific Elements: Analyze -Data that has been collected., Collect -Samples, Document -The removal activities. Prepare a written report., Support -The removal activities, Advise -The OSC on disposal options and completion of the removal activities.

Description of Work: The initial TDD funding ceiling is set at \$12,000.

Document conditions and conduct air monitoring at the site of the derailment and surrounding areas.

The Contractors shall conduct air monitoring activities at the Site and surrounding areas as directed by the OSC. The Contractors shall document conditions at the Site through photographs and logbook. The Contractor shall assist the OSC in the compilation of any data collected and in the management of said data in Scribe, OSC.net or any other formats as directed. The Contractor shall issue an Acknowledgement of Completion Report summarizing the details of the response in a format as determined by the OSC.

Page 1 Of 2

U.S. EPA, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

Vendor: WESTON SOLUTIONS, INC.

TDD Title: BNSF Panhandle Derailment

Purpose : EXTEND POP

 $\textbf{Priority}: {}^{\texttt{HIGH}}$ Overtime Authorized: Yes

> Invoice Unit: SSID: A6NJ

Project/Site Name: BNSF Panhandle Derailment Project Address : City of Panhandle

County: Carson

City: Panhandle State : $\ensuremath{\mathbb{T}} X$

Zip Code: 79068

TDD #: 1/WESTON-042-16-023

Amendment #: 001 Contract #: EP-W-06-042

Verbal Date: 06/28/2016

Start Date: 06/28/2016

Completion Date : 10/15/2016

Effective Date: 06/28/2016

Work Area: Response / Removal

Work Area Code : $\ensuremath{^{\text{RS}}}$

Activity: Fund Lead Removal

Activity Code: RV Operable Unit: Emergency Code:

Performance Based : $^{\text{No}}$

Authorized TDD Ceiling :	Amount	LOE (Hours)
Previous Action(s)	\$12,000.00	0.00
This Action	\$0.00	0.00
New Total	\$12,000.00	0.00

Specific Elements:

See Schedule

Description of Work:

See Schedule

Region Specific:

CERCLIS:: Misc 2:

Acco	ccounting and Appropriation Information:						SFO:			
Line	Budget / FY Approp Budget Program Object Class Site Project Cost						DCN Line-ID	Funding Category	TDD Amount	

U.S. EPA, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

Vendor: WESTON SOLUTIONS, INC.

TDD #: 1/WESTON-042-16-023

Amendment #: 001
Contract #: EP-W-06-042

Project Officer :	Will LaBombard		Branch Mail Code:	
			Phone Number :	214-665-7199
	(Signature)	(Date)	Fax Number :	
Contracting Officer Re	presentative William Rhoter	Branch Mail Code :		
		Γ	Phone Number :	214-665-8372
	(Signature)	(Date)	Fax Number :	
Contract Specialist:	Michael J. Pheeny		Branch Mail Code :	
			Phone Number :	214-665-2798
	(Signature)	(Date)	Fax Number :	
Contracting Officer :	Michael J. Pheeny		Branch Mail Code :	
Electronically	Signed by Michael J. Pheeny	07/21/2016	Phone Number :	214-665-2798
	(Signature)	(Date)	Fax Number :	
Other Agency Official			Branch Mail Code :	
			Phone Number :	
	(Signature)	(Date)	Fax Number :	_

Specific Elements:

Base ORIG - Analyze -Data that has been collected.,Collect -Samples ,Document -The removal activities. Prepare a written report.,Support -The removal activities,Advise -The OSC on disposal options and completion of the removal activities.

Description of Work:

Amendment 001 - This amendment is to extend the POP to 10/15/2016. No additional funding is required.

Base ORIG - The initial TDD funding ceiling is set at \$12,000.

Document conditions and conduct air monitoring at the site of the derailment and surrounding areas.

The Contractors shall conduct air monitoring activities at the Site and surrounding areas as directed by the OSC. The Contractors shall document conditions at the Site through photographs and logbook. The Contractor shall assist the OSC in the compilation of any data collected and in the management of said data in Scribe, OSC.net or any other formats as directed. The Contractor shall issue an Acknowledgement of Completion Report summarizing the details of the response in a format as determined by the OSC.